| (Caption of Ca  Application of For Approval Including an 1 | SE COUTH CAROLINA<br>SE COURSE ENERGY CA<br>OF Energy Efficie<br>Energy Efficiency<br>Energy Efficiency I | rolinas, LLC ) ncy Plan ) Rider and ) | )    BEFORE THE ) PUBLIC SERVICE COMMISSION ) OF SOUTH CAROLINA ) ) COVER SHEET ) ) DOCKET ) NUMBER: 2007 - 358 - E |                  |                           |  |  |  |
|--|---|---------------------------------------|---|------------------|---------------------------|--|--|--|
| (Please type or print                                      |   |                                       |   |                  |                           |  |  |  |
| Submitted by:  | Catherine E. He   |                                       | SC Bar Number:  |                  |                           |  |  |  |
| Address:   | 526 S. Church S   | ·                                     | Telephone:  | 704-382-8123     |                           |  |  |  |
|  | Charlotte, NC 2   |                                       | Fax:<br>Other:  | 704-382-5690     |                           |  |  |  |
|  |   |                                       |   | vduke-energy.com |                           |  |  |  |
| ☐ Emergency R ☐ Other: ☐ INDUSTRY (C                       | delief demanded in p  |                                       |   | on Commission    | 's Agenda expeditiously   |  |  |  |
| ☐ Electric   | 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -   | l                                     | Letter  |                  | Request                   |  |  |  |
| Electric/Gas   |   | Agreement                             | Memorandum  | 1                | Request for Certificatio  |  |  |  |
| ☐ Electric/Teleco  | mmunications  | Answer                                | Motion  | •                | Request for Investigation |  |  |  |
| Electric/Water   |   | Appellate Review                      | Objection   |                  | Resale Agreement          |  |  |  |
| Electric/Water/Telecom.                                    |   | Application                           | Petition  |                  | Resale Amendment          |  |  |  |
| ☐ Electric/Water/Sewer                                     |   | Brief                                 | Petition for R  | econsideration   | Reservation Letter        |  |  |  |
| Gas  |   | Certificate                           | Petition for R  | ulemaking        | Response                  |  |  |  |
| Railroad   |   | Comments                              | Petition for Ru   | e to Show Cause  | Response to Discovery     |  |  |  |
| Sewer  |   | Complaint                             | Petition to Int   | ervene           | Return to Petition        |  |  |  |
| ☐ Telecommunica  | ations  | Consent Order                         | Petition to Inter   | vene Out of Time | ☐ Stipulation             |  |  |  |
| ☐ Transportation   |   | Discovery                             | Prefiled Testi  | mony             | Subpoena                  |  |  |  |
| Water  |   | Exhibit                               | Promotion   |                  | ☐ Tariff                  |  |  |  |
| Water/Sewer  |   | Expedited Consideration               | Proposed Ord  | er               | Other:                    |  |  |  |
| Administrative Matter                                      |   | Interconnection Agreement             | Protest   |                  |                           |  |  |  |
| Other:   |   | Interconnection Amendmen              | t Publisher's At  | fidavit          |                           |  |  |  |
|  |   | Late-Filed Exhibit                    | Report  |                  |                           |  |  |  |





Duke Energy Corporation ECO3T / P.O. Box 1006 Charlotte, NC 28201

CATHERINE E. HEIGEL Associate General Counsel 704.382.8123 OFFICE 704.382.5690 FAX ceheigel@duke-energy.com

February 19, 2009

Charles Terreni, Esq.
Chief Clerk and Administrator
The Public Service Commission of South Carolina
P. O. Drawer 11649
Columbia, South Carolina 29211

Re:

Application of Duke Energy Carolinas, LLC for Approval of Energy Efficiency Plan Including an Energy Efficiency Rider and Portfolio of Energy Efficiency Programs (the "Application")

Docket No. 2007-358-E

Dear Mr. Terreni:

Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company") appreciates the Commission's desire, as stated in Order No. 2009-59, to act thoughtfully to consider and rule on the Company's Application. We believe the Commission appropriately seeks to fulfill its statutory obligations to the citizens of South Carolina by carefully weighing and evaluating the testimony, settlement agreements and legal briefs filed in this docket.

Unfortunately, the continued delay in obtaining a final order in this proceeding presents several significant concerns for the Company. First, Duke Energy Carolinas faces growing customer dissatisfaction with its inability to offer the energy efficiency programs described in the Company's Application filed on September 28, 2007. As indicated in the attached correspondence from customers, low income organizations, and community ministries, these programs will generate real bill savings for South Carolina citizens and businesses at a time when they need it most. Second, the delay in obtaining program approvals could jeopardize the Company's ability to assist the state in obtaining funding for energy efficiency programs created by Title VII of the 2009 American Recovery and Reinvestment Act (also known as the Stimulus Bill) because such grants will be limited to the expansion of existing energy efficiency programs "approved" by the Commission. Lastly, the continued delay in obtaining final approval of Duke Energy Carolinas' Energy Efficiency Plan is complicating the Company's integrated resource

planning efforts. The Company has included in its Annual Plans filed with the Commission in 2007 and 2008 energy efficiency program savings that offset the need for supply-side resources. In the absence of approval from the Commission to move forward with our Energy Efficiency Plan, the Company may have to secure other resources to meet customers' energy needs.

As a result of the business considerations outlined above, Duke Energy Carolinas finds itself in the difficult position of having to invoke the notice provisions of S.C. Code Ann. § 58-27-870(C) (Supp. 2007) to obtain a ruling on its Application. Therefore, with due respect to the Commission's need to fully evaluate our Application, Duke Energy Carolinas hereby provides the Commission with formal notice that it has failed to rule and issue its order within six months of the date the Company filed its Application and proposed Rider EE (SC) as required by South Carolina law.

Duke Energy Carolinas recognizes that the Commission's extended deliberation in this matter is the result of its desire to render a carefully considered decision and is not an attempt to cause undue harm to the Company or its customers. We are pleased that the Commission moved forward to permit the parties to file legal briefs last month and believe this action has afforded the environmental intervenors, the only party with whom Duke Energy Carolinas did not reach settlement, an opportunity to make their final arguments in this case. The Commission's efforts to hear all points of view and ensure fairness in these proceedings are to be commended.

To assist the Commission in rendering its decision within the ten day period established by S.C. Code Ann. § 58-27-870(C), the Company has enclosed the joint proposed order of Duke Energy Carolinas and the Office of Regulatory Staff for the Commission's review and consideration. The proposed order affirms the settlement agreements Duke Energy Carolinas reached in this case with the Office of Regulatory Staff, the South Carolina Energy Users Committee, Wal-Mart Stores East, L.P, and Piedmont Natural Gas Company, Inc.

We appreciate the Commission's attention to this matter.

Sincerely,

Catherine E. Heigel

cc: Parties of Record

### **BEFORE**

### THE PUBLIC SERVICE COMMISSION OF

### **SOUTH CAROLINA**

### **DOCKET NO. 2007-358-E**

| In re:                                    | ) |                        |
|---|---|------------------------|
| Application of Duke Energy Carolinas, LLC | ) |                        |
| For Approval of Energy Efficiency Plan    | ) | CERTIFICATE OF SERVICE |
| Including an Energy Efficiency Rider and  | ) |                        |
| Portfolio of Energy Efficiency Programs   | ) |                        |
|   | ) |                        |

This is to certify that I have placed a copy of the foregoing Letter and Proposed Order of Duke Energy Carolinas in the United States mail, postage prepaid, to the persons listed below on this 19<sup>th</sup> day of February 2009.

Nanette Edwards, Esquire Deputy General Counsel Office of Regulatory Staff Post Office Box 11263 Columbia, South Carolina 29211

Gudrun Thompson, Esquire J. Blanding Holeman, IV, Esq. Southern Environmental Law Center 200 West Franklin St., Suite 330 Chapel Hill, NC 27516

James H. Jeffries, IV, Esquire Moore & Van Allen, PLLC Bank of America Corporate Center 100 North Tryon Street, Suite 4700 Charlotte, NC 28202-4003 Jeremy C. Hodges, Esquire Nelson Mullins Riley & Scarborough, LLP 1320 Main Street 17th Floor Columbia, SC 29201

Robert E. Tyson, Jr., Esquire Sowell Gray Stepp & Laffitte, LLC Post Office Box 11449 Columbia, SC 29211

Scott Elliott, Esquire Elliott & Elliott, P.A. 721 Olive Street Columbia, SC 29205

This, the 19<sup>th</sup> day of February 2009.

Catherine E. Heigel

Associate General Counsel
Duke Energy Corporation

526 S. Church Street, EC03T

Charlotte, NC 28202 Tel: 704-382-8123

### ATTACHMENT A

# **CUSTOMER CORRESPONDENCE**

- A-1 BMW Manufacturing Co.
- A-2 Clarion Technologies, Inc.
- A-3 Greenwood Mills, Inc.
- A-4 Schneider Electric/Square D
- A-5 CCHT LLC
- A-6 North Greenville University
- A-7 Leigh Fibers, Inc.
- A-8 Kyocera Mita SC, Inc.
- A-9 Electrolux Major Appliances
- A-10 International Wire High Performance Conductors
- A-11 Bob Jones University
- A-12 Wellstone Mills

A-1

A subsidiary of BMW AG

## **BMW Manufacturing Co.**



February 17, 2009

To:

Public Service Commission of South Carolina

Subject:

Duke Energy's Energy Efficiency Filing (Save-a-Watt)

BMW Manufacturing Co., LLC requests the Public Service Commission move forward now, and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-a-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

We need to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business planning and budget cycles.

We respectfully request the Commission to act now on this approval.

Sincerely

BMW Manufacturing Co., LLC.

Robert M. Hitt Department Manager Public Affairs Corporate Communications

Department Manager

Public Affairs

Company BMW Manufacturing Co., LLC BMW Group Company

Mailing Address
PO Box 11000
Spartanburg, SC
29304-4100

Office Address 1400 Highway 101 South Greer, SC 29851

> Telephone (864) 989-5536

Fax (864) 989-5527

E-mail robert.hitt@bmwmc.com **From:** Mussman, Jon [mailto:jmussman@clariontechnologies.com]

**Sent:** Monday, February 16, 2009 11:45 AM

To: DeRoberts, Emily K

**Subject:** Duke Energy's Energy Efficiency Filing (Save-a-Watt)

Clarion Technologies Inc. requests the Public Service Commission move forward NOW, and approve Duke Energy's Energy Efficiency Filing. During these uncertain and definitely challenging times, our business and others need to save the pennies today so the dollars will be there in the future. This Save-a-Watt program is just what we need to make us stay competitive. We need to know now what the future will hold for us and the economy so we can better plan our business.

We respectfully request the commission to be prompt and positive in their action in support of this filing.

Jon Mussman General Manager Clarion Technologies, Inc. Phone: (864) 225-2539 Ext. 217

Fax: (864) 226-2469



Wade Harter Vice President

P: (864) 941-4053 F: (864) 941-4070

To: Public Service Commission of South Carolina

Re: Duke Energy's Energy Efficiency Filing (Save-a-Watt)

Greenwood Mills request the Public Service Commission to move forward to approve Duke Energy's Energy Efficiency Filing

It is understood that the filing, in addition to the Save-a-Watt program includes continuation of the Interruptible Service Rider under the name of Power Share. Greenwood was one of the initial customers to sign on to Duke's Interruptible Service Rider in 1991. This program has played a vital role in Greenwood's ability to maintain some degree of competitiveness in a market dominated by cheap imports.

As you are probably aware energy is a major component in the cost structure of a manufacturing operation, especially textiles. Energy efficiency programs such as the Interruptible Service Rider and Save-a-Watt are thus important to manufacturing if such is to continue to exist and experience some degree of growth.

In order to effectively plan and budget our operations we must know what our energy cost are going to be and Duke's Energy Efficiency Filing will make a difference.

We respectfully request the Commission to act now to approve the Filing.

Sincerely,

Wade T. Harter Corporate Engineer From: Jerry.Usry@us.schneider-electric.com [mailto:Jerry.Usry@us.schneider-electric.com]

**Sent:** Monday, February 16, 2009 11:04 AM

**To:** DeRoberts, Emily K

Subject:

To: Public Service Commission of South Carolina

Subject: Duke Energy's Energy Efficiency Filing (Save-a-Watt)

Schneider Electric/Square D requests the Public Service Commission move forward now, and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-a-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

We need to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business planning and budget cycles.

We respectfully request the Commission to act now on this approval.

Sincerely

Jerry Usry, PE, CEM Regional Facilities Manager Square D/Schneider Electric 864.886.1733 offc 864.247.3669 cell **From:** Countryman, Christy [mailto:ccountryman@ccht.com]

Sent: Monday, February 16, 2009 4:15 PM

To: Gerrard, Bruce

Cc: Hendershot, Jim; Horne, Kelli

Subject: Duke Energy's Energy Efficiency Filing (Save-a-Watt)

To: Public Service Commission of South Carolina

CCHT LLC requests the Public Service Commission move forward now, and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-a-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

We need to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business planning and budget cycles.

We respectfully request the Commission to act now on this approval.

Sincerely,

Christy Countryman Sr. Accountant South Carolina Resource Center Bluewater Thermal Services (864) 601-1166 / Phone (864) 601-1175 / Fax



A-6



NORTH GREENVILLE UNIVERSITY • P.O. BOX 1892 • TIGERVILLE, SC 29688 • (864) 977-7000

OFFICE OF THE PRESIDENT

February 16, 2009

TO: Public Service Commission of South Carolina

The purpose of this letter is to request the Public Service Commission to move forward now, and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-a-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

It would help us to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business planning and budget cycles. North Greenville University certainly depends on the expertise of Duke Energy concerning these matters.

We respectfully request the Commission to act now on this approval.

Sincerely,

James B. Epting

President

----Original Message----

From: llister@leighfibers.com [mailto:llister@leighfibers.com]

Sent: Monday, February 16, 2009 1:56 PM

To: Mize, Charles R

Subject:

Dear Mr. Mize

I would like to express my support for the "Save-A-Watt" program that Duke Energy has proposed. I believe that this program will help Leigh Fibers to realize real energy reductions and therefore improve our competitiveness. In the current economic environment, cost cutting opportunities are vital to our continued financial health.

In addition to expressing support, it is my hope that we can quickly gain a better understanding of what programs will be available from Duke. As discussed in our 2009 Business/Service Plan meeting, it is critical to our business planning process to have clarity with regard to the timing and content of any potential programs.

Sincerely,

Chris Walsh Vice President of Operations LEIGH FIBERS, INC. From: FREDHARTWI@aol.com [mailto:FREDHARTWI@aol.com]

Sent: Tuesday, February 17, 2009 6:23 AM

To: Gerrard, Bruce

Subject: Re: Duke Energy's Energy Efficiency Filing

To: Public Service Commission of South Carolina

Subject: Duke Energy's Energy Efficiency Filing (Save-a-Watt)

To: Public Service Commission:

Kyocera Mita SC, Inc. located in Fountain Inn SC is a manufacturer of photocopier toner. The imaging business is highly competitive and every advantage is explored to deliver a least cost product to the market. In addition, the Kyocera corporate philosophy mandates energy reductions and efficiency improvements on a documented annual basis. With this in mind, Kyocera is requesting that the Public Service Commission move expediently and approve Duke Energy's Energy Efficiency Filing. We plan to utilize the additional advantages afforded through the Savea-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

Once approved, we plan to approach Duke regarding what efficiency programs Duke Energy is going to make available so our business model can be enhanced and more competitive.

Kyocera Mita SC, Inc.respectfully requests the Commission to act now on this approval.

Sincerely,

Fred Hartwig

Director, Manufacturing and Engineering, Kyocera Mita SC, Inc.

----Original Message----

From: Stephen Barr [mailto:stephen.barr@electrolux.com]

Sent: Tuesday, February 17, 2009 4:19 PM

To: DeRoberts, Emily K

Subject: FW: Duke Energy needs your help!

To: Public Service Commission of South Carolina

Subject: Duke Energy's Energy Efficiency Filing (Save-a-Watt)

Electrolux Major Appliances requests the Public Service Commission move forward now, and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-a-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

We need to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business planning and budget cycles.

We respectfully request the Commission to act now on this approval.

Sincerely

Steve Barr

EHS Manager Electrolux - Anderson, S. C.

864-260-0408

\*

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| immediately | by  | return | e-mail | and  | delete | it  | from  | your | computer. |      |
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| *****       | *** | ****** | *****  | **** | ****** | *** | ***** | **** | *****     | **** |

From: Burr, Bill To: Mize, Charles R

**Sent**: Tue Feb 17 09:05:01 2009 **Subject**: Save-A-Watt request

To: Public Service Commission of South Carolina

Subject: Duke Energy's Energy Efficiency Filing (Save-A-Watt)

International Wire High Performance Conductors requests the Public Service Commission move forward now, and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-A-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

We need to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business plans and operating budgets.

We respectfully request the commission to act now on this approval,

Sincerely,

William H. Burr
Maintenance Manager
IWG High Performance Conductors
864-472-0402
William.Burr@iwghpc.com

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If you are not the intended recipient or have received this message in error, please notify the sender immediately and delete the original. Any other use of this e-mail is prohibited.



February 18, 2009

To: Public Service Commission of South Carolina

Subject: Duke Energy's Energy Efficiency Filing (Save-a-Watt)

Bob Jones University requests that the Public Service Commission move forward now and approve Duke Energy's Energy Efficiency Filing. We and other businesses need the Save-a-Watt program because of what the real energy and bill savings will mean to our business, especially in these challenging economic times.

We need to know what efficiency programs Duke Energy is going to make available so we can more effectively complete our business planning and budget cycles.

We respectfully request the Commission to act now on this approval.

Sincerely,

Kevin Ingalls

Gen April 15

Director of Utilities



### RECEIVED DEC 0 2 2008

C. Dukes Scott Executive Director

# STATE OF SOUTH CAROLINA OFFICE OF REGULATORY STAFF

1401 Main Street Suite 850 Columbia, SC 29201

November 26, 2008

Chairman Fleming
Chief Executive and Administrative Officer
Public Service Commission
101 Executive Center Drive
Saluda Building, Ste. 100
Columbia, SC 29210

RE: Application of Duke Energy Carolinas, LLC for Approval of Energy Efficiency Plan Including an Energy Efficiency Rider and Portfolio of Energy Efficiency Programs (the "Energy Efficiency" filing)

Docket No. 2007-358-E

Dear Chairman Fleming:

I am forwarding the attached letter from Mr. David Cattrell, Manager of Engineering, Wellstone Mills, which was sent to my attention. We echo his request to close the docket and also ask the Commission to establish a deadline for the filing of proposed orders/briefs.

Thank you for your consideration of this matter.

Sincerely,

C. Dukes Scott Executive Director

Enclosure

cc: All Commissioners

Charles Terreni, Chief Clerk and Administrator

Parties of Record Mr. David Cattrell November 13, 2008

C. Dukes Scott
Executive Director
State of South Carolina
Office of Regulatory Staff
1401 Main Street, Suite 900
Columbia, S.C. 29201

Re: Duke Energy Carolinas' Energy Efficiency Plan

Dear Mr. Scott:

Duke Energy Carolinas has pending before the Public Service Commission of South Carolina an energy efficiency plan designed to meet customer demand as a "fifth fuel". As a major customer of Duke Energy Carolinas, I would like to express my support of their Energy Efficiency Plan and filing in Docket No. 2007-358-E. In the industrial sector, we see our costs rising rapidly, and recognize that energy efficiency needs to play a more active role in helping us reduce our costs.

I believe it is in the public interest to have the docket closed and the settlement approved by the PSC. I appreciate your efforts to share my support for Duke's filing with the PSC. Duke's plan will help businesses like mine experience significant savings, which is especially important in these troubled economic times.

Sincerely,

David Cattrell

Manager of Engineering

avid Cathell

Wellstone Mills

### **ATTACHMENT B**

# CORRESPONDENCE FROM LOW INCOME ORGANIZATIONS AND **COMMUNITY MINISTRIES**

- Greer Relief & Resources Agency B-1
- B-2 HOPE in Lancaster, Inc.
- B-3 Piedmont Community Actions, Inc.
- TOTAL Ministries of Spartanburg County B-4
- Clover Area Assistance Center B-5
- B-6 Clemson Community Care
- Greater Spartanburg Ministries United Christian Ministries B-7
- B-8

**From:** Caroline T. Robertson [mailto:caroline.robertson@greerrelief.org]

Sent: Thursday, February 19, 2009 11:40 AM

To: Schultz, Ted

Subject: Duke Energy Carolinas' Energy Efficiency Plan Letter of Support

Dear Mr. Schultz,

I am writing this letter in enthusiastic support of the Duke Energy Carolinas' Energy Efficiency Plan submitted in September, 2007. Greer Relief has been an agency partner with Duke Energy for many years, serving low income residents with heating and cooling assistance. The continual support we receive from Duke Energy is a direct result of their commitment to serve the community, not only by providing energy but also by focusing on improving their way of life.

We have experienced a significant increase in needed services during this time of unease, more people are struggling financially, and more families are in need of our services. The energy and financial savings from this program would benefit low income residents we serve. Should this project be funded, we would be available to partner further with Duke Energy to facilitate the energy efficiency program.

As Executive Director of Greer Relief, I am writing to endorse this program. We look forward to working together with you on this plan.

Sincerely,

### **Caroline T. Robertson**

Executive Director
Greer Relief & Resources Agency
J. Verne Smith Human Resource Center
202 Victoria Street

PO Box 1303 Greer, SC 29652 (864) 848-5355 www.greerrelief.org

Helping Families Help Themselves
...serving Greer, Taylors, Duncan, Lyman & Wellford

No virus found in this outgoing message.

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Version: 7.5.552 / Virus Database: 270.11.1/1960 - Release Date: 2/19/2009 10:48 AM

From: Hope of Lancaster

**To:** Schultz, Ted **Cc:** Corn, Michael W

Sent: Thu Feb 19 13:07:45 2009

**Subject**: Letter of support

Mr. Schultz,

Due to the tremendous increase we have seen in recent months of people in dire need of emergency assistance, this is to confirm that HOPE in Lancaster is not only in full support of your endeavor, but actively encourages you to move forward with this initiative.

To repeat, HOPE in Lancaster, Inc. is in full support of the Energy Efficiency Plan that Duke Energy is proposing to the Public Service Commission of South Carolina. We do hope the Commission will take immediate action to approve this plan.

With the economy of South Carolina and particularly Lancaster with its 13.9 % unemployment rate, we feel this program would be of benefit to the families of our state with energy and financial savings. At our agency we have seen a 45% increase in the number of families seeking help this January over last January. Of that 45% increase 25 % of the families have never had to seek assistance before.

It is going to take each of us working together to ride out the economic crisis we are in. With Duke Energy trying to provide better services for its customers my fervent hope is that the commission will move forward quickly with this plan.

HOPE in Lancaster remains committed to helping families in crisis. We hope the commission will recognize the urgency of this program Duke Energy has initiated.

Elaine S. Adkins Executive Director

HOPE in Lancaster, Inc. PO Box 166 Lancaster, SC 29721 From: Jean Mullinax To: Schultz, Ted Cc: Corn, Michael W

**Sent**: Thu Feb 19 12:44:57 2009 **Subject**: Energy Efficiency Plan

Hi Ted,

I was wondering if you have any news on the Energy Efficiency Plan?

As you know we serve low income families with heating and cooling assistance who have met hardship or elderly and disabled low income families who have very low income. This year with the economy in such dire need of repair we have seen a lot more families who have lost jobs and cannot afford heating for their homes. The numbers are astounding.

The Energy Efficiency Plan would certainly help many families who cannot afford weatherizing their homes or even small fixes to cut the cost of energy. We are giving money for heat assistance but if the energy is going through poorly insulated or sub-standard housing much of the money seems to be wasted.

Please let us hear the outcome for Duke Energy's Energy Efficiency Plan and thank you for all the effort that has gone into this plan.

Jean Mullinax LIHEAP Director Piedmont Community Actions, Inc. (864)585-8183 From: Paul Clay [mailto:tministr@bellsouth.net]
Sent: Thursday, February 19, 2009 12:33 PM

**To:** Schultz, Ted **Cc:** Corn, Michael W

Subject:

I am writing in support of the Duke Energy Carolinas' Energy Efficiency Plan.

TOTAL Ministries of Spartanburg County has experienced a dramatic increase in the number of requests, the amount spent to meet those requests, and a dramatic increase in people seeking help who never have asked for help in the past. The following information is provided to highlight the increased demands placed on this agency:

Our heating assistance starts mid-November until end of March <u>dependent on the weather</u> we may delay or shorten if possible. Additionally, we normally close Fridays in the summer months, I extended that indefinitely, so the increase here for this winter are a 4-day week, last winter was a 5-day week.

December - 26% increase in interviews

December - 32% increase in heating assistance (closed for one week due to warm up)

January numbers have no changes.

Nov – Feb expenses for this winter, heating assistance = \$57,000 (21% increase)

Nov – Feb expenses for last winter, heating assistance = \$47,000

This winter we received a 5% discount from Spinx on kerosene purchases

The Duke Energy Carolinas' Energy Efficiency Plan would immediately impact families who are struggling with basic living costs. At a time when South Carolina is struggling with the third highest unemployment rate in the nation, it is self-evident that families will be less concerned with energy efficiency and "going green" than they will be with heat, food, shelter, and medicine. It is a bold, forward-thinking plan that Duke is advancing to get ahead of this deficit in bringing down utility bills and allow more cash-flow for an already hard-pressed family.

Sincerely,

Paul Clay
Executive Director
TOTAL Ministries of Spartanburg County

From: Dona Van Leer [mailto:donacaac@bellsouth.net]

Sent: Thursday, February 19, 2009 12:11 PM

**To:** Schultz, Ted **Cc:** Corn, Michael W **Subject:** Duke Energy

Ted Schultz
Vice-President of Marketing and Energy Efficiency

#### Dear Ted:

I am Dona Van Leer, Operations Manager of Clover Area Assistance Center located in Clover, SC. The Center assists low income families in the Clover School District with food and financial assistance; most of the time for electric bills of which we send to you.

We were so happy to hear Duke Energy was thinking "outside of the box" by filing this for an energy saving program back in September, 2007; and given the state of the economy today, we are finding many more people struggling financially. Any reduction in their electric bill would be a tremendous assistance to them and to us.

Our agency continues to look for an innovative way to work with Duke in assisting our customers. Being part of the Agency Portal we learned about the plan to provide free compact fluorescent lights to low income customers who took an on-line survey as part of the Agency Portal. We were delighted to partner with Duke to help make this happen; however, have heard nothing new. I understand that currently you are awaiting Public Service Commission approval.

Please let us know if there is anything we can do to assist you to make this happen. It sounds only like a win, win, win for all concerned and we are anxious to see it happen.

Dona Van Leer Operations Manager CAAC (803) 222-4837 From: judygrant01@bellsouth.net

To: Schultz, Ted

Sent: Thu Feb 19 13:22:37 2009

Subject: Duke Energy Carolinas, Energy Plan

Clemson Community Care would like to thank you for all that you have done to help us help our clients. At this time, many of our low income people are struggling more than ever, just to maintain themselves.

With employment harder to find, those who lose jobs are searching much longer. With costs rising, a number of our clients are having to choose between warmth, food and medicine.

Duke energy Carolina's Energy Efficiency Plan would help low income people stretch their already meager funds. We certainly support this.

We urge the Public Service Commission of South Carolina to approve Duke Energy Carolina's Energy Efficiency Plan.

Sincerely,

Judith Grant Program Director Clemson Community Care **From:** kevin koger **To:** Schultz, Ted

Sent: Thu Feb 19 13:26:37 2009

Dear Ted,

I am with Greater Spartanburg Ministries and we provide needy clients with heating and cooling assistance.

I am writing to express support for Duke Energy's Carolinas' energy efficiency plan. We would like to see the Public Service Commission of South Carolina approve Duke Energy Carolinas□ Energy Efficiency Plan.

We feel that the programs in this plan could benefit our clients, those with low household incomes.

We have seen our client base grow nearly double since last summer. We are particularly interested in saving our clients money on their energy bills. We would like to see everyone have the energy saving bulbs in their homes, but the up front cost has prevented clients from replacing their old bulbs. We need the resources of Duke Energy to make this happen, as well as the support of their plan by the commission. We feel this plan will help our clients stretch their dollars better and lower the need for financial assistance for energy among these households.

In turn, this will help us reach more clients that we are currently unable to see at this time.

Regards,

Kevin Koger

**CEO-Greater Spartanburg Ministries** 

680 Asheville Hwy

Spartanburg, SC 29303

864-585-9371



Telephone (864) 855-0853 Fax (864) 855-5882

United Christian Ministries

Post Office Box 1774 • Easley, South Carolina 29641

February 19, 2009

Ted Schultz
Duke Energy
Vice-President of Marketing and Energy Efficiency

Good Afternoon Mr. Schultz:

United Christian Ministries (UCM) is an emergency assistance agency serving individuals in Pickens County, South Carolina in meeting their basic needs for food, clothing, shelter, and utilities. The people we serve are in crisis due to circumstances beyond their control such as loss of employment, death of a spouse, illness or injury, etc.. In addition, we serve many in our community who are elderly and/or disabled and exist on low, fixed monthly incomes. For many years, we have enjoyed an excellent relationship with Duke Energy as one of the many "Share the Warmth" agencies in the Carolinas.

At the last Duke Energy Customer Care meeting I attended, I was excited to hear about Duke Energy Carolinas' Energy Efficiency Plan that had been submitted to the South Carolina Public Service Commission for approval in September 2007. Given the economic times we are all facing, you can only imagine how difficult it is for members of low-income households to meet their basic needs on limited or fixed incomes that are already stretched too far. The provisions within Duke's plan to assist these very customers as well as the benefits to agencies such as United Christian Ministries are to be applauded. The number of "new customers" we have served at UCM due to furloughs or layoffs in recent months has been alarming as we strive to maintain the needed resources to meet the increased needs. It is my hope that our Public Service Commission will acknowledge the benefits of your proposal and provide approval of Duke Energy Carolinas' Energy Efficiency Plan in a timely manner as we all work together to meet the increased needs in our communities.

Sincerely,

Teresa Nash, Executive Director

United Christian Ministries (864)855-0853, ext. 33

### **BEFORE**

# THE PUBLIC SERVICE COMMISSION OF

### **SOUTH CAROLINA**

DOCKET NO. 2007-358-E – ORDER NO. 2009-\_\_\_\_ MARCH \_\_\_\_, 2009

| In re:                                    | ) |                        |
|---|---|------------------------|
| Application of Duke Energy Carolinas, LLC | ) | ORDER APPROVING ENERGY |
| For Approval of Energy Efficiency Plan    | ) | EFFICIENCY PLAN AND    |
| Including an Energy Efficiency Rider and  | ) | ADOPTION OF AMENDED    |
| Portfolio of Energy Efficiency Programs   | ) | SETTLEMENT AGREEMENT   |
|   | ) |                        |
|   | ) |                        |
|   | ) |                        |

This matter comes before the Public Service Commission of South Carolina (the "Commission") on the application of Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company"), pursuant to S.C. Code Ann. §§ 58-27-820, 58-27-870, and 58-37-20 requesting approval of (1) a new regulatory approach to energy efficiency programs, (2) an energy efficiency rider to implement the energy efficiency plan, and (3) a portfolio of energy efficiency programs (collectively, the "Energy Efficiency Plan").

Pursuant to 26 S.C. Regs. § 103-817(C)(3) (Supp. 2007), a Notice of Filing and Hearing regarding Duke Energy Carolinas' Application for Approval of Energy Efficiency Plan Including an Energy Efficiency Rider and Portfolio of Energy Efficiency Programs (the "Application") was prepared and published in newspapers of general circulation in the affected areas. In addition, Duke Energy Carolinas mailed a copy of the Notice of Filing and Hearing directly to customers receiving service from Duke Energy Carolinas as bill inserts and posted the notice on its website.

The Notice of Filing and Hearing established November 12, 2007, as the date by which interested parties or entities could file petitions to intervene or present their views in writing with

the Commission. Piedmont Natural Gas Company, Inc. ("Piedmont"), Southern Environmental Law Center ("SELC"), the Coastal Conservation League ("CCL"), the Southern Alliance for Clean Energy ("SACE"), Environmental Defense ("ED") (SECL, CCL, SACE, ED collectively the "Environmental Intervenors"), South Carolina Energy Users Committee ("SCEUC"); and Wal-Mart Stores East, LP ("Wal-Mart") each filed a Petition to Intervene. No other petitions to intervene were filed with the Commission.

The pre-filed direct testimony of James E. Rogers, Chairman, President and Chief Executive Officer of Duke Energy Corporation; Ellen T. Ruff, President of Duke Energy Carolinas; Nick Hall, President and owner of TecMarket Works; Judah Rose, Managing Director of ICF International; Jane Sadowsky, Senior Managing Director at Evercore Partners; Theodore E. Schultz, Vice President-Energy Efficiency for Duke Energy Business Services, LLC; Richard G. Stevie, PhD, Managing Director of Customer Market Analytics for Duke Energy Shared Services, Inc.; Stephen M. Farmer, consultant and retired from Duke Energy Shared Services, Inc. as Revenue Requirements Director; Dwight L. Jacobs, Vice President, Franchise Electric & Gas Accounting for Duke Energy Business Services, LLC; and Janice Hager, Managing Director of Integrated Resource Planning and Environmental Strategy of Duke Energy Business Services, LLC was filed by the Company on December 10, 2007.

The pre-filed testimony of David Nichols, Senior Consultant with Synapse Energy Economics, Inc.; Donald Gilligan, President of the National Association of Energy Service Companies; Frank Knapp, Jr., President and Chief Executive Officer of the South Carolina Small Business Chamber of Commerce; and James B. Atkins, President of Regulatory Heuristics, LLC on behalf of the Environmental Intervenors was filed on January 17, 2008. Piedmont filed the testimony of Thomas E. Skains, Chairman, President and Chief Executive Officer of Piedmont

and Frank Yoho, Senior Vice President, Commercial Operations of Piedmont on January 17, 2008.

Duke Energy Carolinas filed the rebuttal testimony of James E. Rogers; Theodore Schultz; Janice D. Hager; Richard G. Stevie; Stephen M. Farmer; and Charles Cicchetti, cofounder and member in Pacific Economic Group, LLC on January 24, 2008. The Environmental Intervenors filed the surrebuttal testimony of John D. Wilson, Director of Research for Southern Alliance for Clean Energy; James B. Atkins; David Nichols; Frank Knapp, Jr.; and Donald Gilligan on January 28, 2008. Piedmont filed the surrebuttal testimony of Frank Yoho on January 28, 2008.

On January 29, 2008, Duke Energy Carolinas filed an Explanatory Brief and Joint Motion for Approval of a Partial Settlement and Adoption of Settlement Agreement on behalf of the Office of Regulatory Staff ("ORS"), Duke Energy Carolinas, SCEUC, and Wal-Mart ("Duke-ORS Settlement"). The supplemental testimony of Ellen T. Ruff and Stephen M. Farmer in support of the settlement was filed with the Joint Motion.

On February 1, 2008, the Joint Motion for Approval of Partial Settlement and Adoption of Settlement Agreement between Duke Energy Carolinas, ORS and Piedmont was filed ("Piedmont Settlement"). As a result of the Piedmont Settlement Agreement, Piedmont withdrew its opposition to the Company's Application subject to Piedmont's right to oppose subsequent individual program tariff filings. The parties also committed to work together over the next four months to resolve issues relating to the Company's proposed programs.

The Commission began its formal hearing on this matter on February 5, 2008, and it continued through February 6, 2008, in the hearing room of the Commission with the Honorable G. O'Neal Hamilton, presiding. Lawrence B. Somers, Esquire; Catherine E. Heigel, Esquire; and

Frank R. Ellerbe, III, Esquire represented Duke Energy Carolinas. Nanette S. Edwards appeared on behalf of the South Carolina Office of Regulatory Staff. Gudrun E. Thompson, Esquire and J. Blanding Holman, IV, Esquire represented SELC, CCL, SACE, and ED. James H. Jeffries, IV, Esquire and Jeremy Hodges, Esquire represented Piedmont. Robert E. Tyson, Jr., Esquire and Alan R. Jenkins, Esquire represented Wal-Mart. Scott Elliott, Esquire represented the SCEUC. In this Order, Duke Energy Carolinas, ORS, SELC, CCL, SACE, ED, SCEUC, and Wal-Mart are collectively referred to as the "Parties."

At the outset of the hearing, counsel for ORS, Duke Energy Carolinas, and Piedmont described the partial settlements filed with the Commission by Duke Energy Carolinas, ORS, SCEUC, and Wal-Mart on January 29, 2008 and by Duke Energy Carolinas, ORS and Piedmont on February 1, 2008. The Environmental Intervenors opposed the motion to approve the settlement at the hearing indicating they did not have adequate time to respond prior to the hearing. (Tr. Vol. 1, p. 18-20). Both Settlement Agreements were admitted into the evidence of record. The Piedmont Settlement provided for the implementation of a discussion process involving Duke Energy Carolinas, Piedmont, and ORS (the "Duke-Piedmont Settling Parties"). Hearing Exhibit 1.

In the Duke-ORS Settlement Agreement, Duke Energy Carolinas, ORS, SCEUC, and Wal-Mart ("Duke-ORS Settling Parties") represented to the Commission that they had discussed the issues presented in this case and determined that each of the Duke-ORS Settling Parties' interests and the public interest would best be served by settling all of the issues between the Duke-ORS Settling Parties in accordance with the terms and conditions contained in the Settlement Agreement. Hearing Exhibit 2. The Duke-ORS Settlement Agreement is attached to this Order as Order Exhibit 1 and is incorporated and made part of this Order.

As provided in the Piedmont Settlement Agreement, subsequent to the evidentiary hearing the Piedmont Settling Parties have represented to the Commission that they have been involved in extensive discussions concerning the Piedmont issues. As a result, on July 11, 2008, the Piedmont Settling Parties filed an Explanatory Brief and Joint Motion to Approve an Amended Settlement Agreement among Duke Energy Carolinas, ORS, and Piedmont ("Amended Piedmont Settlement"). In the Amended Piedmont Settlement, Duke Energy Carolinas and Piedmont represented that their interests, and ORS has determined that the public interest, would best be served by settling all of the issues between Duke Energy Carolinas, ORS, and Piedmont. The Amended Piedmont Settlement Agreement detailing the terms and conditions of the settlement is attached to this Order as Exhibit 2 and is incorporated and made part of this Order.

Prior to the hearing, the parties agreed that the pre-filed testimony of several Duke Energy Carolinas' witnesses could be stipulated into the record. At the hearing Duke Energy Carolinas presented the stipulated pre-filed testimony of Nick Hall, Judah Rose, and Jane Sadowsky. Mr. Hall's testimony discussed the adequacy of the Company's program evaluation protocols and proposed measurement and verification methods. Mr. Rose provided an economic analysis and Ms. Sadowsky provided a financial analysis of the Energy Efficiency Plan. Ms. Sadowsky's testimony indicated that although energy efficiency has been pursued in many parts of the country for years, the reality is that energy efficiency programs do not make a material contribution to investor-owned utilities' resource portfolios.

Duke Energy Carolinas then presented the testimony of Ellen T. Ruff. Ms. Ruff gave an overview of Duke Energy Carolinas' operations in South Carolina. Duke Energy Carolinas has approximately 530,000 customers in South Carolina. She summarized the need for additional

capacity from the 2007 Integrated Resource Plan ("IRP"). She also explained how the Company's capacity needs can be met, in part, through treating energy efficiency as a fifth fuel and the impetus of the Company's push to achieve greater energy efficiency results. Ms. Ruff also explained how approval of the Application would be in the best interests of the customers of South Carolina and the best interests of the shareholders. Ms. Ruff also provided testimony in support of the Duke-ORS Settlement in which she summarized specific aspects of the settlement.

Duke Energy Carolinas' Witness James E. Rogers explained that the Company's proposed Energy Efficiency Plan approach to energy efficiency is predicated on two principal aspirations: (1) to become the leading provider of energy efficiency products and services to their customers which will enable the communities served by Duke Energy Carolinas to become the most energy efficient economies in the United States; and (2) to substantially "de-carbonize" the energy supply. Mr. Rogers explained why a new regulatory model for utility-sponsored energy efficiency is needed that will stimulate investment and innovation in energy efficiency products and services and widespread customer participation.

Duke Energy Carolinas then presented the direct and rebuttal testimony of Theodore Schultz, Vice President of Energy Efficiency. Mr. Schultz's direct testimony provided a historical overview of Duke Energy Carolinas' demand side management ("DSM") and energy efficiency programs, discussed the challenges associated with achieving energy efficiency, and described how the "Energy Efficiency Plan" approach provides significantly more value to customers than traditional energy efficiency programs. He also discussed the portfolio of energy efficiency programs and plans for developing future programs. Mr. Schultz estimated the capacity and energy savings and projected customer savings. He also testified as to why the Company's Energy Efficiency Plan is in the public interest. In his rebuttal testimony, Mr.

Schultz responded to concerns about the demand response or load management programs, the risk of not recovering program costs, and appropriate expectations for energy efficiency achievements in low cost states like South Carolina.

Duke Energy Carolinas then presented the rebuttal testimony of Mr. Rogers in which he responded to the statements made by Environmental Intervenors' Witness Nichols that the proposed Energy Efficiency Plan compensation model was radical. He explained that the Energy Efficiency Plan proposal is an innovative and fundamentally different approach that is needed if utilities are to achieve significant gains in energy efficiency.

Duke Energy Carolinas then presented the direct and rebuttal testimony of Richard G. Stevie, PhD, Managing Director of Customer Market Analytics for Duke Energy Shared Services, Inc. Dr. Stevie testified about the market potential study, the DSMore model, the assumptions underlying the modeling and cost-effectiveness tests, and the results of those cost-effectiveness analyses. He also discussed the method to evaluate and verify the results of the implementation of the energy efficiency programs. Dr. Stevie's rebuttal testimony responded to several criticisms contained in the pre-filed testimony of the Environmental Intervenors' Witnesses Gilligan and Knapp relating to the disclosure of program information, criticisms of the Indiana energy efficiency programs, and refuting their assertion that Duke Energy Carolinas' proposal is not consistent with the Company's market potential study.

The hearing reconvened on Wednesday, February 6, 2008, during which time the Environmental Intervenors were allowed to present the direct and surrebuttal testimony of Donald Gilligan and Frank Knapp, Jr. out of time. Mr. Gilligan, President of the National Association of Energy Service Companies, testified that although he supported the idea of large-scale energy efficiency programs, he believes that the current proposal is flawed because it is not

sustainable. Mr. Gilligan testified that the Application was deficient because it did not disclose all of the necessary data in a form that facilitates public discussion. Mr. Knapp, the CEO and President of the South Carolina Small Business Chamber of Commerce, testified that (1) Duke Energy Carolinas' cost of capital in the Energy Efficiency Plan proposal is excessive compared to recent rates approved for South Carolina Electric & Gas Company; (2) Duke Energy Carolinas' proposal would achieve less energy efficiency compared to similar programs in other states and charges more for the savings; (3) it is not clear that small businesses will have the same opportunity to participate as other classes of customers; and (4) the fiscal impact on small businesses is not clear.

Duke Energy Carolinas then continued presenting its witnesses. Stephen Farmer, former employee of Duke Energy Shared Services, presented his direct testimony and supplemental testimony supporting the Duke-ORS Settlement. Mr. Farmer explained the proposed ratemaking treatment relating to the Energy Efficiency Plan and provided an estimate of expected jurisdictional rate impacts resulting from recovery of energy efficiency costs through the rider. He explained the key changes incorporated in the settlement agreement including the reduction in compensation to the company from 90% to 85%, the opt-out provisions for non-residential energy efficiency programs, and the allocation of cost recovery relating to demand response programs reflecting customer class contributions to peak demands. He presented changes in the proposed riders to \$0.001586 per kilowatt-hour for residential customers, \$0.000984 for general service customers and \$0.000665 for industrial customers as a result of the Duke-ORS Settlement. He also explained the settlement provision whereby the accumulated DSM deferral balance would be flowed through to customers as a reduction in their bills. The flow-through of accumulated DSM deferral balance would be used to offset, in its entirety, the amount

recoverable under the Rider EE (SC) until the deferral balance has been returned. As of November 2007, the accumulated deferred balance was \$87 million. Mr. Farmer's rebuttal testimony responded to the Environmental Intervenors' Witness Atkins' contentions regarding the cost of capital rate used to calculate the value of avoided capacity costs.

Dwight L. Jacobs, Vice President, Franchise Electric & Gas Accounting for Duke Energy Business Services, LLC discussed the Company's proposed deferral of energy efficiency program costs and the amortization of those costs over the life of the programs. He also explained the proposal to treat the earnings stream from the Energy Efficiency Plan in a similar manner to that which would have been produced by a generating plant investment for reporting purposes.

Duke Energy Carolinas then presented the direct and rebuttal testimony of Janice D. Hager, Managing Director of Integrated Resource Planning and Environmental Strategy of Duke Energy Business Services, LLC. Ms. Hager discussed the need for new capacity outlined in the Company's 2007 IRP and how energy efficiency is reflected in the integrated resource planning models. In her rebuttal testimony, Ms. Hager refuted Piedmont's testimony that the Company's Energy Efficiency Plan encourages fuel inefficiency and consumer fuel switching. She also corrected statements in the testimony of the Environmental Intervenors' Witnesses Nichols and Atkins concerning Duke Energy Carolinas' past demand side management achievements and Commission-approved incentives. The Environmental Intervenors presented the testimony of David Nichols, John Wilson, and James B. Atkins. Mr. Nichols of Synapse Energy Economics presented direct and surrebuttal testimony in which he asserted that the proposal was fundamentally flawed because it does not base the proposed revenues to the utility on the utility's actual incurred costs. Mr. Nichols urged the Commission to reject the Application in its

entirety. He also suggested that the Commission order the Company to expand its demandresponse and load management type programs from their existing level, based on existing ratemaking arrangements. Mr. Nichols also recommended that the Company file a new application that deals with just conservation and bases cost recovery on the actual projected costs.

The Environmental Intervenors presented the surrebuttal testimony of John Wilson, Director of Research for the Southern Alliance for Clean Energy in which Mr. Wilson opposed the cost recovery mechanism proposed by the save-a-watt program based on allegations that it costs too much to consumers and delivers too few energy savings to avoid construction of large power plants. The Environmental Intervenors then presented the direct and surrebuttal testimony of James B. Atkins, President of Regulatory Heuristics, LLC. Mr. Atkins testified that the proposed energy efficiency programs were inadequate as compared to Duke Energy Carolinas' historical DSM efforts, that the proposed Rider EE (SC) was inconsistent with regulatory principles in light of the S.C. Energy Conservation and Efficiency Act, S.C. Code Ann. Section 58-27-20 (Supp. 2007). Mr. Atkins also testified about his concerns with the Duke-ORS Settlement.

Duke Energy Carolinas then presented the rebuttal testimony of Charles J. Cicchetti, PhD, of Pacific Economic Group, LLC. Dr. Cicchetti responded to portions of the Environmental Intervenors' testimony. He testified that Duke Energy Carolinas' Energy Efficiency Plan is an innovative approach that offers significant benefits to customers. Dr. Cicchetti explained why he believes that the Energy Efficiency Plan model has the potential to become a national model to incentivize utilities to expand energy efficiency aggressively in both traditionally regulated and restructured markets.

Piedmont moved that the stipulated direct testimony of Thomas E. Skains, Chairman, President, and Chief Executive Officer of Piedmont and that the direct and surrebuttal testimony Frank Yoho, Senior Vice President, Commercial Operations of Piedmont be entered into the record. Mr. Skains' testimony sets forth Piedmont's position on energy efficiency, cost recovery and the incentive rate design concepts incorporated into Duke Energy Carolinas' Energy Efficiency Plan. Mr. Yoho's testimony also addressed Piedmont's concerns with the proposed plan and proposed principles to evaluate all utility sponsored energy efficiency programs.

The Commission kept the proceeding open to allow the Environmental Intervenors time to respond to the motions for approval of the two partials settlements, to receive additional requested exhibits, and to allow Duke Energy Carolinas to respond to Mr. Atkins' supplemental testimony. The Environmental Intervenors filed their response to the motions to approve the settlements on February 13, 2008. As requested by the Commission, Duke Energy Carolinas filed two late-filed hearing exhibits on February 19, 2008, on demand side management-deferred costs and the South Carolina deferral balance summary. Duke Energy Carolinas and ORS filed replies to the Environmental Intervenors' response on February 21, 2008.

On November 21, 2008, Duke Energy Carolinas filed a series of proposed tariffs for the proposed Energy Efficiency Plan programs. On November 25, 2008, Duke Energy Carolinas requested that the Commission close the record in the case and require legal briefs and/or proposed orders to be submitted. On December 9, 2008, the Environmental Intervenors responded to the Company's request contending that the proposal was inadequate. The Environmental Intervenors suggested that the Company's Energy Efficiency Plan be approved on an interim basis with incurred costs placed into a deferred account for later true-up once an appropriate compensation mechanism is approved and subject to a requirement that the Company

file for approval a suite of more robust programs. On December 10, 2008, the Commission issued a directive requiring the parties to submit briefs including the answers to the following questions: (1) How will potential federal mandates for energy efficiency affect save-a-watt, as the new administration has said it intends to invest substantial sums of money in this area? (2) Is it appropriate for Duke to base the Company's compensation under save-a-watt's on a PURPA avoided cost rate? Is this method of compensation required by state law? (3) Please comment or elaborate on the suggestions contained in the South Environmental Law Center's filling of December 9<sup>th</sup>, 2008.

On January 15, 2009, the Environmental Intervenors filed their Joint Brief in which they contended that as proposed, the Company's Energy Efficiency Plan would cost too much and yield too little energy savings. With the concurrence of ORS, Duke Energy Carolinas filed its Brief in Support of the Application for Approval of Energy Efficiency Plan and Approval of Settlements on January 15, 2009. Duke Energy Carolinas' Brief explained why the proposal is consistent with the public policy outlined in the S.C. Energy Efficiency Act. It also addressed the Environmental Invervenors' criticisms and answered the questions posed by the Commission's directive.

Based upon consideration of the briefs, pleadings, testimony, and exhibits received into evidence at the hearing, and the record as a whole, the Commission makes the following:

### FINDINGS OF FACT AND CONCLUSIONS OF LAW

These findings of fact and conclusions of law apply to Duke Energy Carolinas' Application as amended by the Duke-ORS Settlement Agreement and the Amended Piedmont Settlement Agreement.

## **Jurisdiction**

- 1. Duke Energy Carolinas is a public utility with a public service obligation to provide electric utility service to customers in its service area in South Carolina. The Company is subject to the jurisdiction of the Commission pursuant to S.C. Code Ann. Section 58-3-140(A) (Supp. 2007).
- 2. The Commission has jurisdiction over this Application pursuant to the South Carolina Energy Conservation and Efficiency Act, S.C. Code Ann. Section 58-37-10 through 58-37-40 (Supp. 2007) ("Energy Efficiency Act") and S.C. Code Ann. Section 58-27-870 (Supp. 2007).

# **Need for Energy Efficiency**

3. Duke Energy Carolinas filed its Application for approval of the save-a-watt approach, energy efficiency rider and portfolio of energy efficiency programs on September 28, 2007. With this approach, Duke Energy Carolinas proposed to be compensated similarly for meeting customer demand, whether through energy efficiency or generation. Duke Energy Carolinas developed its proposed energy efficiency programs in collaboration with customers, state agencies, environmental groups, and other interested stakeholders. These programs are: Residential Energy Assessments, Residential Smart \$aver®, Residential Low Income Energy Efficiency and Weatherization Assistance, Energy Efficiency Education Program for Schools, Residential Power Manager, Non-Residential Energy Assessments, Non-Residential Smart

\$aver<sup>®</sup>, Non-Residential PowerShare<sup>®</sup>, and Research Pilot Programs Efficiency Savings Plan and Advanced Power Manager Program. We find that the Company used a transparent and open process to develop the portfolio of energy efficiency programs that included substantial input from its customers, state agencies, environmental groups, and other stakeholders. The Energy Efficiency Plan model provides the opportunity to achieve and maintain energy efficiency success on a sustained basis. Therefore, we approve Duke Energy Carolinas' request to start implementing its Energy Efficiency Plan.

- 4. Duke Energy Carolinas' 2007 Annual Plan filed with this Commission in Docket No. 2005-356-E shows substantial load growth and the need for significant capacity additions to meet Duke Energy Carolinas' customers' needs over the next twenty years. The 2007 Annual Plan shows a cumulative need for resource additions of approximately 3,400 megawatts by 2012, 6,600 megawatts by 2017, and 10,700 megawatts by 2027. The Company projects that its Energy Efficiency Plan will offset the need for generating resources that would have been required to meet customer needs by providing over 1,860 megawatts of capacity and 743,000 megawatt-hours of energy needed in its North Carolina and South Carolina service territories over the next four years.
- 5. In the 2007 Annual Plan, Duke Energy Carolinas tested its resource portfolio options against a wide range of sensitivities and scenarios, including the possibilities of fuel commodity price changes, environmental emission mandates, and structural regulatory requirements. The Company concluded that portfolios including the Energy Efficiency Plan were the best options. The save-a-watt compensation model and proposed energy efficiency programs are consistent with the Company's 2007 Annual Plan.

6. Duke Energy Carolinas evaluated its proposed programs under the Participant Test, the Utility Cost Test, the Total Resource Cost Test, and the Rate Impact Measure Test for screening energy efficiency measures. The Company analyzed the proposed energy efficiency programs for cost-effectiveness and determined that portfolios including these programs are lower cost to customers than alternative portfolios that do not include the proposed energy efficiency programs. We find that Duke Energy Carolinas' proposed energy efficiency programs are cost-effective and the program costs are reasonable.

# Save-A-Watt Regulatory Model

- 7. The save-a-watt regulatory model is in the public interest and benefits the Company's customer body as a whole. The save-a-watt approach will benefit Duke Energy Carolinas' customers and the public by displacing a portion of the electricity otherwise needed to meet its customers' energy requirements with a zero air emissions resource, lowering bills for customers on average compared to the bills that would result from additional generation resources, and offering the potential to substantially lower bills for customers who participate in energy efficiency programs.
- 8. The save-a-watt approach, as an incentive mechanism, is consistent with the law and public policy of South Carolina, specifically, S.C. Code Ann. Section 58-37-20 (Supp. 2007).
- 9. Under the save-a-watt approach, the Company assumes the risk that energy efficiency will not produce the expected results. Revenues collected through the proposed energy efficiency rider ("Rider EE (SC)") are intended to cover program costs and the financial impact of lost sales, but will be based on actual results achieved. Customers will not have to pay for energy efficiency programs that do not work.

10. The current regulatory approach to utility-sponsored energy efficiency programs across most of the country fails to put energy efficiency on a level playing field with supply-side options. As a consequence, utilities have a natural incentive to focus more on supply-side options than on demand-side and energy efficiency options. The Energy Efficiency Plan regulatory approach levels the playing field by giving Duke Energy Carolinas the opportunity to achieve comparable earnings and comparable growth in earnings for energy efficiency as the Company would for supply-side investments. This level playing field encourages the pursuit of all cost-effective energy efficiency. The Energy Efficiency Plan regulatory model is reasonable, in the public interest and approved by the Commission.

## **Energy Efficiency Portfolio**

- 11. Before Duke Energy Carolinas may implement any new or modified demand-side management or energy efficiency measure, the Company must obtain Commission approval. Duke Energy Carolinas has properly applied for Commission approval of its portfolio of energy efficiency programs and complied with the Commission's filing requirements.
- 12. S.C. Code Ann. Section 58-37-20 (Supp. 2007) provides for cost recovery and incentives for new demand-side management and energy efficiency programs such as those proposed in Duke Energy Carolinas' Energy Efficiency Plan.
- 13. Duke Energy Carolinas' proposed Residential Energy Assessments program is designed to help residential customers identify opportunities to use energy more efficiently through mail-in analysis, on-line analysis, and on-site energy audits. Duke Energy Carolinas has properly applied for Commission approval of its Residential Energy Assessments program and complied with the Commission's filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Residential Energy Assessments program is in the public interest and

will benefit Duke Energy Carolinas' customer body as a whole. The proposed Residential Energy Assessments program is thus eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303.

- 14. Duke Energy Carolinas' proposed Residential Smart \$aver Program will provide residential customers with incentives to install more energy-efficient, ENERGY STAR® certified equipment, such as compact fluorescent light bulbs, refrigerators, clothes washers and dryers, and high-efficiency air conditioners and heat pumps. Duke Energy Carolinas has properly applied for Commission approval of its Residential Smart \$aver program and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Residential Smart \$aver Program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed Residential Smart \$aver program is eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.
- Weatherization Assistance Program will assist low income residential customers with energy efficiency measures or through assistance in purchasing equipment and weatherizing homes. Duke Energy Carolinas has properly applied for Commission approval of its Low Income Energy Efficiency and Weatherization Assistance Program and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Low Income Energy Efficiency and Weatherization Assistance Program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed Low Income Energy Efficiency and Weatherization Assistance Program is thus eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.

- Duke Energy Carolinas' Energy Efficiency Education Program for Schools is designed to educate students about energy efficiency through energy efficiency curriculum, Duke Energy Carolinas' online home audit and on-site school audits. Duke Energy Carolinas has properly applied for Commission approval of its Energy Efficiency Education Program for Schools and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Energy Efficiency Education Program for Schools is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed Energy Efficiency Education Program for Schools is eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.
- 17. Duke Energy Carolinas' proposed Power Manager Program will enable residential customers to receive a monthly credit from July to October in exchange for allowing Duke Energy Carolinas to cycle their central air conditioning systems in times of peak power demand and to interrupt the central air conditioning when the Company has more severe capacity constraints. Duke Energy Carolinas has properly applied for Commission approval of its Power Manager program and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Power Manager program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed Power Manager program is eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.
- 18. Duke Energy Carolinas' proposed Non-Residential Energy Assessments program is designed to help general service and industrial customers identify opportunities to use energy more efficiently through online analysis, telephone interviews, and on-site energy audits. Duke Energy Carolinas has properly applied for Commission approval of its Non-Residential Energy

Assessments program and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Non-Residential Energy Assessments Program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed Non-Residential Energy Assessments program is eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.

- 19. Duke Energy Carolinas' proposed Non-Residential Smart \$aver program will provide incentives for non-residential customers to install high-efficiency equipment such as lighting, heating, ventilation, and air conditioning equipment, motors, and pumps. Duke Energy Carolinas has properly applied for Commission approval of its Non-Residential Smart \$aver program and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed Non-Residential Smart \$aver program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed Non-Residential Smart \$aver program is eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.
- Duke Energy Carolinas' proposed PowerShare® program will enable non-residential customers to receive a credit on their bills in exchange for reducing their electric use in times of peak power demand or unexpected capacity or other operational constraints. Duke Energy Carolinas has properly applied for Commission approval of its PowerShare® program and complied with the filing requirements of 26 S.C. Regs. 103-303 and 103-312(2)(A). The proposed PowerShare® program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole. The proposed PowerShare® program is eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Regs. 103-303.

- 21. Duke Energy Carolinas proposed to close its existing Interruptible Service Rider ("Rider IS") to new customers and to transition Rider IS customers to the Company's proposed PowerShare® program. In connection with the implementation of PowerShare®, it is in the public interest to close existing Rider IS.
- 22. Duke Energy Carolinas proposed to close its existing Standby Generation Control Rider ("Rider SG") to new customers and to transition Rider SG customers to the Company's new PowerShare® program. In connection with the implementation of PowerShare®, it is in the public interest to close existing Rider SG.
- 23. Duke Energy Carolinas proposed to close its existing Residential Load Control Rider ("Rider LC") to new customers and to transition Rider LC customers to the Company's new Power Manager Program. In connection with the implementation of Power Manager, it is in the public interest to close existing Rider LC.
- 24. Duke Energy Carolinas proposed to close its existing Residential Housing Program and replace it with the new Smart \$aver program. In connection with the implementation of Smart \$aver, it is in the public interest to close the existing Residential Housing Program.

### **Settlements**

25. The Duke-ORS Settlement Agreement provides sufficient oversight and monitoring of the Company's Energy Efficiency Plan and supports Duke Energy Carolinas' overall commitment for increased energy efficiency. The Duke-ORS Settlement Agreement provides that the rate impact of Rider EE (SC) is offset by funds that have accrued over time through the operation of the Company's existing demand side management ("DSM") program. The Company is required to defer the difference between the DSM amounts it collects from

customers and what the Company spends to deliver DSM programs. This deferral requirement has resulted in an over collection of DSM amounts from customers of approximately \$87 million as of November 30, 2007 (the "DSM Balance"). The offset provides that no customer class will experience a rate increase for several years and that industrial customers will see a rate decrease. The Duke-SCEUC Settlement Agreement provides that Rider EE (SC) will replace the current DSM charge and the DSM Balance including interest will be calculated by customer class and returned to each customer until the DSM Balance is zero by class or until the Company's next base rate case, whichever occurs first. In addition, all customers will pay for demand response programs and no customer opt out option will apply. Large industrial and general service customers may opt out of the energy conservation portion of the Company's Rider EE (SC) if those customers meet certain conditions outlined in the agreement. This agreement also provides that the costs associated with demand response energy efficiency programs will be allocated among all customer classes based on the class' contribution to the Company's firm peak demand. The settlement also reduced the percentage of avoided costs which will be used to compensate Duke Energy Carolinas from 90% to 85%. It also includes a provision indicating that ORS may conduct a full review and evaluation of the Energy Efficiency Plan in two years and specified how the Company would report the impacts of the proposed plan on energy efficiency revenues in its Quarterly Reports. The agreement extended the review period for ORS and other parties of record to respond to the annual report and Rider EE (SC) update from 75 days to 120 days. After careful review and consideration of the Duke-ORS Settlement Agreement, the Commission concludes that approval of the Duke-ORS Settlement Agreement is in the public interest and that the revisions to the Company's Energy Efficiency Plan agreed to by the Duke-ORS Settling

Parties are reasonable and prudent. Therefore, the Duke-ORS Settlement Agreement is approved by the Commission.

26. The Amended Piedmont Settlement Agreement acknowledges that Duke Energy Carolinas' proposed energy efficiency programs are not intended to displace natural gas or to encourage fuel-switching. The agreement specifically clarified certain issues with the Smart \$aver® Programs. Duke Energy Carolinas and Piedmont also agreed to work together to develop certain joint energy efficiency programs. After careful review and consideration of the Amended Piedmont Settlement Agreement, the Commission concludes that approval of the Amended Piedmont Settlement Agreement is in the public interest. Therefore, the Amended Piedmont Settlement Agreement is approved by the Commission.

## Verification and Evaluation

- 27. Duke Energy Carolinas proposed a comprehensive plan for verifying megawatt and megawatt-hour savings using the services of independent third parties. Such evaluation will enable the Company, the Commission, and other interested stakeholders to quantify the energy and demand savings produced by these programs, as well as to identify the most effective programs and to design improvements for programs over time.
- 28. After the initial implementation period of approximately two years the Duke Energy Carolinas Energy Efficiency Plan is subject to a full review and evaluation by ORS and ORS may make recommendations regarding any changes, corrections or amendments to the Energy Efficiency Plan that ORS deems to be in the public interest. Program flexibility is necessary to enable the Company to deliver all cost-effective energy efficiency which can be built into the Company's IRP.

### **Energy Efficiency Rider**

- 29. Pursuant to S.C. Code Ann. Section 58-37-20 the Commission may establish a rider to allow Duke Energy Carolinas to recover all reasonable and prudent costs incurred in adopting and implementing new demand-side management and energy efficiency measures, as well as appropriate utility incentives, including net lost revenues. To compensate and encourage the Company to supply capacity through energy efficiency, we find that Duke Energy Carolinas' request for approval of Rider EE (SC) to recover the amortization of and return on 85% of the costs avoided through implementation of its proposed energy efficiency programs is prudent, reasonable, and in the public interest. Recovery of 85% of avoided costs provides an appropriate incentive because it allows the Company an earnings opportunity similar to investment in generation, yet offers a 15% discount to customers compared to supply side investment. Therefore, we approve the Company's request for approval of Rider EE (SC).
- 30. The Rider EE (SC) billing factors shall be calculated separately for residential, general service and industrial customers. The residential charge shall be calculated based on the avoided costs of programs available to residential customers; the general service charge shall be calculated based on the avoided costs of programs applicable to general service; and the industrial service charge shall be calculated based on the avoided costs of programs applicable to industrial service customers. The first year Rider EE (SC) charge for residential customers shall be \$0.001586 per kilowatt-hour, \$0.000984 per kilowatt-hour for general service customers, and \$0.000665 per kilowatt-hour for industrial customers.

# **Accounting and Reporting**

31. In order to implement the save-a-watt approach and match the energy efficiency program expenses with the recognition of revenues from Rider EE (SC) in a reasonable manner

for the Company's financial purposes, Duke Energy Carolinas is authorized to defer the program costs and to amortize them over the life of the applicable program, with the acknowledgment that the revenues established under the proposed energy efficiency rider, which are based on avoided costs, specifically include the recovery of incurred program costs.

32. Duke Energy Carolinas proposed that it account for the impacts of the proposed regulatory treatment in its Quarterly Reports by including revenues earned through Rider EE (SC) and expenses calculated at 85% of the avoided generation costs as calculated in Rider EE (SC). The Company proposed that actual program costs for the reporting period will be included for information purposes as a footnote in the Reports. The Company's proposed reporting of the impacts of the Energy Efficiency Plan in its Quarterly Reports appropriately excludes the impact of the incentives from the earnings amounts reported so that the Company's reported earnings, when assessed against its allowed rate of return, are not inflated by the incentives that are needed and appropriate to encourage investment in energy efficiency measures.

### Jurisdiction

#### EVIDENCE FOR FINDINGS AND CONCLUSIONS Nos. 1 & 2

Duke Energy Carolinas is an electric utility subject to the jurisdiction of the Commission pursuant to S.C. Code Ann. Sections 58-3-140(A) (Supp. 2007). The Commission has jurisdiction over the Company's Application pursuant to the Energy Efficiency Act, S.C. Code Ann. Sections 58-37-10 through 58-37-40 (Supp. 2007). The evidence in support of these findings of fact is found in the Application, pleadings, testimony and exhibits in this docket, and the statutes, case law, and rules governing the authority and jurisdiction of this Commission.

The Commission's broad statutory ratemaking authority grants it jurisdiction over the application. S.C. Code Ann. § 58-3-140(A) (Supp. 2007). Duke Energy Carolinas' Energy

Efficiency Plan encourages the aggressive pursuit of energy efficiency consistent with the Energy Efficiency Act. The Energy Efficiency Act authorizes the Commission to adopt procedures to encourage electrical utilities to invest in cost-effective energy efficient technologies and energy conservation programs. These procedures must provide incentives and cost recovery for energy suppliers who invest in energy supply and end-use technologies that are cost effective, environmentally acceptable, and reduce energy consumption or demand. These procedures must allow energy suppliers to recover costs and to obtain a reasonable rate of return on their investment in qualified demand-side management programs that are at least as financially attractive as construction of new facilities. S.C. Code Ann. § 58-37-20 (Supp. 2007).

The Energy Efficiency Act gives the Commission broad authority to allow energy suppliers to recover costs and obtain a reasonable rate of return on their investment. The save-a-watt model recognizes the value of energy efficiency services that will be provided to customers, and is consistent with the longstanding concept of value-of-service ratemaking. (Tr. Vol. 1, p. 351). S.C. Code Ann. Section 58-27-840 (1976) recognizes value-of-service pricing as an

S.C. Code Ann. Section 58-37-20 (Supp. 2007) provides that:

The South Carolina Public Service Commission may adopt procedures that encourage electrical utilities and public utilities providing gas services subject to the jurisdiction of the commission to invest in cost-effective energy efficient technologies and energy conservation programs. If adopted, these procedures must: provide incentives and cost recovery for energy suppliers and distributors who invest in energy supply and end-use technologies that are cost-effective, environmentally acceptable, and reduce energy consumption or demand; allow energy suppliers and distributors to recover costs and obtain a reasonable rate of return on their investment in qualified demand-side management programs sufficient to make these programs at least as financially attractive as construction of new generating facilities; require the Public Service Commission to establish rates and charges that ensure that the net income of an electrical or gas utility regulated by the commission after implementation of specific cost-effective energy conservation measures is at least as high as the net income would have been if the energy conservation measures had not been implemented. For purposes of this section only, the term "demand-side activity" means a program conducted by an electrical utility or public utility providing gas services for the reduction or more efficient use of energy requirements of the utility or its customers including, but not limited to, utility transmission and distribution system efficiency, customer conservation and efficiency, load management, cogeneration and renewable energy technologies. (Emphasis added).

appropriate consideration by the Commission in establishing classifications.<sup>2</sup> The Commission has a history of considering the relative merits of cost of service and value of service in rate proceedings involving telephone utilities and gas companies.<sup>3</sup>

The incentives the Company seeks under its save-a-watt compensation model are based upon paying the Company a percentage of the avoided costs achieved by both demand-side management and energy conservation measures. The Company would only be paid for the actual demand and energy reduction impacts achieved and verified by a third party. (Tr. Vol. 1, p. 123-124 & 194).

South Carolina courts have generally interpreted the ratemaking statutes as giving the Commission considerable latitude in the exercise of its ratemaking authority. *See, e.g., Nucor Steel, a Division of Nucor Corporation v. South Carolina Public Service Commission,* 312 S.C. 79, 85, 439 S.E. 2d 270, 273 (1994). The Commission's broad statutory authority under S.C. Code Ann. §58-3-140(A) (Supp. 2007), and S.C. Code Ann. § 58-37-20 (Supp. 2007) clearly establish the Commission's legal authority to approve Duke Energy Carolinas' Energy

<sup>&</sup>quot;No electrical utility...shall, as to rates or services, make or grant any unreasonable preference or advantage to any person, corporation, municipality or consolidated political subdivision to its unreasonable prejudice or disadvantage....Subject to the approval of the Commission, however, electrical utilities...may establish classifications of rates and services and such classifications may take into account the conditions and circumstances surrounding the service, such as the time when used, the purpose for which used, the demand upon plant facilities, the value of the service rendered, and any other reasonable consideration." S.C. Code Ann. § 58-27-840 (1976).

In re: Application of General Telephone Co. for an Adjustment in Rates for Intrastate Telephone Service, Docket No. 18,269, Order No. 19,978 p. 23 & 27 (local tariffs were determined on a "value of service concept."); In re: Application of Southern Bell Telephone and Telegraph Co. to Change Certain of its Rates and Charges, Docket No. 78-353-C, Order No. 79-90, p. 48-49; In re: Application of Southern Bell Telephone and Telegraph Co. to Change Certain of its Intrastate Rates and Charges, Docket No. 79-305-C, Order No. 80-113, p. 66; In re: Application of General Telephone Co. to Change Certain of its Intrastate Rates and Charges, Docket No. 81-121-C, Order No. 81-721, p. 39; In re: Application of General Telephone Co. to Change Certain of its Intrastate Rates and Charges, Docket No. 84-390-C, Order No. 85-200, p. 35; In re: Application of GTE South, Inc. for an Adjustment in Rates for Intrastate Telephone Service, Docket No. 90-698-C, Order No. 91-412, p. 61; In re: Application of S.C. Pipeline Corp. for a Rate Reduction and Adjustments in its Gas Rate Schedules and Tariffs, Docket No. 90-204-G, Order No. 90-729 ("S.C. Pipeline Order No. 90-729); In re: Application of S.C. Pipeline Corp. Maximum Rates for Industrial Customers, Docket No. 90-588-G, Order No. 95-1717 (S.C. Pipeline Order No. 95-1717).

Efficiency Plan, including its save-a-watt compensation model. The Commission concludes that it has the authority to consider and approve the relief the Company is seeking in this docket.

## **Need for Energy Efficiency**

## EVIDENCE FOR FINDING AND CONCLUSION No. 3

The process used by the Company to develop the portfolio of energy efficiency programs included substantial input from its customers, state agencies, environmental groups and others. The Energy Efficiency Plan model provides the opportunity to achieve and maintain energy efficiency success on a sustained basis. The evidence in support of this finding is based upon Duke Energy Carolinas' Application in this docket and the testimony and exhibits of Duke Energy Carolinas' Witnesses Rogers, Ruff and Schultz.

Duke Energy Carolinas filed its Application in this docket on September 28, 2007, requesting approval of its Energy Efficiency Plan, including a portfolio of energy efficiency programs in which the Company will invest at least 1% of its annual retail revenues from the sale of electricity. (*Application*, ¶ 5).

The Company's Energy Efficiency Plan is based on the premise that the Company should be compensated similarly for investments in energy efficiency programs, as it would for investments in generation. Under traditional regulation, a utility is allowed to recover the depreciation and operating costs for a new plant and also earn a return on the un-depreciated plant. Under the save-a-watt regulatory approach, the utility would be allowed to recover 85% of the depreciation and operating costs avoided by not building the new plant and also earn a return. (Tr. Vol. 1, p. 119-120, 194). This would be accomplished by an energy efficiency rider that would compensate the Company for achieving verified efficiency results. (Tr. Vol. 2, p. 524-526, 545-547).

Duke Energy Carolinas also seeks authorization to implement its proposed portfolio of energy efficiency programs. The Company developed its portfolio of programs in collaboration with the ORS, The Timken Corporation, Sierra Club, Environmental Edge Consulting, the University of South Carolina Update, Greenville County Schools, and the South Carolina State Energy Office ("Collaborative"). (Tr. Vol. 1, p. 254).

Theodore Schultz, Duke Energy's Vice President of Energy Efficiency, explained how the Company selected the programs to be included in the proposed portfolio. (Tr. Vol. 1, p. 254-255 & 274-275). First, it compiled a list of energy efficiency programs already offered and tested by Duke Energy Carolinas and its affiliate utility operating companies. Second, the Company solicited new program ideas from all members of the Collaborative and solicited direct input from South Carolina customers. Third, the Company applied multiple cost-effectiveness analyses to evaluate all current or proposed programs. Programs deemed cost-effective were incorporated into a master list of program ideas and reviewed by the Collaborative members, and finally, consolidated into the list of energy efficiency programs included in the portfolio. (*Id.*).

The programs for which the Company seeks approval include: Residential Energy Assessments, Residential Smart \$aver, Low Income Energy Efficiency and Weatherization Assistance Program, Energy Efficiency Education Program for Schools, Power Manager, Non-Residential Energy Assessments, Non-Residential Smart \$aver, and PowerShare®. The process used to develop the portfolio included substantial input from a diverse group of customers, state agencies, environmental groups, and other stakeholders. (Tr. Vol. 1, p. 254-255 & 274-275). The portfolio includes many of the programs recommended to the Company by these stakeholders during the collaborative process that led to the filing of the Energy Efficiency Plan.

The Environmental Intervenors have requested that Duke Energy Carolinas work with an advisory group to develop an expanded portfolio of energy conservation programs. (Environmental Intervenors' Brief, p. 18). We are not persuaded that it is necessary to work with another advisory group prior to implementing the proposal. As described above, Duke Energy Carolinas has already used a process that included substantial input from a diverse advisory group.

We also disagree with the Environmental Intervenors' contention that the Company's Energy Efficiency Plan is too heavily focused on demand-response programs to the detriment of significant energy conservation achievements. The July 2006 National Action Plan for Energy Efficiency ("NAPEE") defines energy efficiency as "using less energy to provide the same or improved level of service to the energy consumer in an economically efficient way. The term energy efficiency as used here includes less energy at any time, including at times of demand through demand response and peak shaving efforts." NAPEE, p. ES-12. We agree with Duke Energy Carolinas' Witness Schultz who testified that you must look at energy efficiency from a customer's perspective if you want higher levels of participation. (Tr. Vol. 1, p. 267). A customer wants to know how to be more productive in his use of energy which may include demand response and energy conservation programs. (Tr. Vol. 1, p. 284-285).

We conclude that the Energy Efficiency Plan model provides the opportunity to achieve and maintain energy efficiency success on a sustained basis. Therefore, the Company should be allowed to start implementing the proposed Energy Efficiency Plan approach.

### EVIDENCE FOR FINDINGS AND CONCLUSIONS Nos. 4 & 5

Duke Energy Carolinas' 2007 Annual Plan shows substantial load growth and the need for significant capacity additions to meet customer needs over the next twenty years. The Company's Energy Efficiency Plan will offset the need for some generating resources that would have been required over the next four years. Portfolios that include the proposed energy efficiency programs are consistent with the 2007 Annual Plan. The evidence in support of these findings is based upon the Company's 2007 Annual Plan filed on November 15, 2007 in Docket No. 2005-356-E and the testimony and exhibits of Duke Energy Carolinas Witnesses Hager and Ruff.

Janice Hager, Duke Energy's Managing Director of Integrated Resource Planning and Environmental Strategy, offered extensive testimony as to the annual planning process that lead to the development of Duke Energy Carolinas' 2007 Annual Plan. The Annual Plan is developed with the objective of meeting customers' needs for a highly reliable energy supply at the lowest reasonable cost. (Tr. Vol. 2, p. 636). Witness Hager testified that the Company develops and files an annual resource plan based upon a 20-year load forecast and a target planning reserve margin of 17%. (Tr. Vol. 2, p. 638-639). Ms. Hager explained that the Company's current load forecast reflects a 1.6% average annual growth in summer peak demand and a 1.4% annual growth for winter peaks. (Tr. Vol. 2, p. 637). The 2007 Annual Plan identifies a cumulative need for resource additions of approximately 3,400 megawatts by 2012, 6600 megawatts by 2017, and 10,700 megawatts by 2027. (Tr. Vol. 1, p. 118 & 127; Vol. 2, p. 638-639). No Intervenor offered any evidence to contradict the Company's load forecast.

Witness Hager testified that the Company develops its resource plan to meet customers' energy needs by considering a combination of existing purchase power contracts, existing and

new generation, and customer energy efficiency options. (Tr. Vol. 2, p. 636). In the 2007 Annual Plan, Duke Energy Carolinas tested its resource portfolio options against a wide range of sensitivities and scenarios, including the possibilities of fuel commodity price changes, environmental emission mandates, and structural regulatory requirements. (Tr. Vol. 2, p. 640). The quantitative analysis conducted by the Company during the IRP process indicated that a combination of additional base load, intermediate and peaking generation, renewable resources, and energy efficiency programs is required over the next 20 years to meet customer demand. (*Id.*).

Witness Hager testified that the 2007 IRP reflects the impact of the energy efficiency programs proposed in this Application. (*Id.*). She explained that for the IRP analysis, the projected revenues under Rider EE (SC) were used as program costs to ensure that the programs are beneficial to customers under the proposed Energy Efficiency Plan model. (Tr. Vol. 2, p. 642). The 2007 IRP analysis showed that portfolios including the proposed energy efficiency programs were lower cost to customers than alternative portfolios that did not include the proposed energy efficiency programs, indicating that the proposed programs are part of the "optimum" resource plan. (Tr. Vol. 2, p. 642-643).

The Company projects that its Energy Efficiency Plan will contribute over 1,860 megawatts of capacity and 743,000 megawatt-hours of energy needed in its North Carolina and South Carolina service territories over the next four years. (Tr. Vol. 1, p. 119). If the implementation of the Company's Energy Efficiency Plan yields the results projected in the 2007 Annual Plan, Duke Energy Carolinas will be able to avoid building at least one new 700

megawatt gas-fired plant and to defer two others by a year over the next ten years. <sup>4</sup> (Tr. Vol. 2, p. 643, 650). Witness Hager confirmed that the impacts expected from the Company's proposed energy efficiency programs are consistent with those projected in the 2007 IRP. (*Id.*).

The Commission concludes that Duke Energy Carolinas has sufficiently demonstrated that the Energy Efficiency Plan is consistent with the Company's 2007 IRP. The Commission agrees that the proposed energy efficiency programs will potentially provide substantial benefits in meeting Duke Energy Carolinas' growing customer need.

## EVIDENCE FOR FINDING AND CONCLUSION No. 6

The proposed energy efficiency programs are cost-effective and the program costs are reasonable. The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witnesses Stevie and Schultz and the Environmental Intervenors' Witness Gilligan. Company Witness Richard Stevie provided extensive testimony on the DSMore model that the Company uses to evaluate energy efficiency programs, as well as the cost-effectiveness tests utilized and the results of these cost-effectiveness analyses.

#### DSMore Model

Witness Stevie explained that DSMore is a financial analysis tool designed to evaluate the costs, benefits, and risks of energy efficiency programs and measures. (Tr. Vol. 1, p. 362). DSMore allows the Company to measure the risks and benefits of employing energy efficiency

Pursuant to the Cliffside CPCN Order, Duke Energy Carolinas was required to retire up to 800 megawatts of older coal-fired generating units on a megawatt-per-megawatt basis to account for load reductions realized by new energy efficiency and demand-side management programs. Subsequently, in the air permit issued by the North Carolina Department of Environment and Natural Resources for the new advanced clean coal Cliffside Unit 6, Duke Energy Carolinas agreed to retire the 800 megawatts of additional coal capacity from coal-fired emission units located in North Carolina, without regard to achieving a commensurate level of megawatt savings from new energy efficiency and demand-side programs. Because the retirement schedule is no longer tied to the energy efficiency results, Duke Energy Carolinas did not count the 800 megawatts when calculating the capacity the save-a-watt programs will avoid and when projecting the Company's ability to avoid building a 700 megawatt gas-fired plant. (Tr. Vol. 2, p. 632-633 & 645-646).

measures versus traditional generation capacity additions, and to ensure that demand-side resources are compared to supply-side resources on a level playing field. (*Id.*). DSMore provides the results of the Utility Cost Test, Rate Impact Measure Test, Total Resource Cost Test, Participant Test, and Societal Test for energy efficiency programs. (Tr. Vol. 1, p. 362-363). Generally, the DSMore model requires the user to input specific information regarding the energy efficiency measure or program to be analyzed (*e.g.*, projected program costs) as well as the cost and rate information of the utility (*e.g.*, avoided capacity costs). These inputs enable the user to then analyze the cost-effectiveness of the measure or program. (Tr. Vol. 1, p. 363).

## How Programs or Measures are Modeled

Witness Stevie explained that an analyst or program manager develops the inputs for the program or measure using information on expected program costs, load impacts, customer incentives necessary to drive customers' participation, free rider expectations, and expected number of participants. (Tr. Vol. 1, p. 364). This information is used in initial runs of the model to determine cost-effectiveness and whether adjustments need to be made to a program or measure in order for it to pass the Participant Test. (Tr. Vol. 1, p. 364).

Environmental Intervenors' Witness Donald Gilligan criticized Duke Energy Carolinas for not fully disclosing its program information. (Tr. Vol. 2, p. 431-433). Duke Energy Carolinas' Witnesses Stevie and Schultz outlined the extensive information provided to the Environmental Intervenors during the proceeding in response to very detailed data requests. Mr. Schultz explained that the avoided cost calculations used in modeling were confidential because the Company is frequently in the market for wholesale purchase power opportunities to serve retail customers. (Tr. Vol. 1, p. 274-275 & 387-388). Public information was also available in the Duke Energy Carolinas Annual Plan on file with the Commission. (Tr. Vol. 1, p. 387-388).

### Cost-Effectiveness Tests

Witness Stevie testified that the most important test of energy efficiency costeffectiveness lies in the IRP model run comparisons with and without the energy efficiency
programs inserted as resource options. (Tr. Vol. 1, p. 366). Dr. Stevie explained that comparing
the energy costs from an IRP with the energy efficiency impacts to one without the energy
efficiency impacts provides the best overall estimate of the avoided energy costs that also
embodies any base load and intermediate avoided capacity costs not captured in the peaker
capacity cost. (Tr. Vol. 1, p. 366-367).

Witness Stevie testified that the Participant Test is the first screen for a program or measure to make sure a program makes economic sense for the individual consumer. (Tr. Vol. 1, p. 367-368). Dr. Stevie explained that the Participant Test compares the benefits to the participant through bill savings and incentives from the utility, relative to the costs to the participant for implementing the energy efficiency measure. (Tr. Vol. 1, p. 368). Duke Energy Carolinas also uses the Utility Cost Test ("UCT") to compare utility benefits (avoided costs) relative to incurred utility costs to implement the program. (*Id.*). The Total Resource Cost Test ("TRC") compares the total benefits to the utility and to participants relative to the costs to the utility to implement the program along with the costs to the participant. (*Id.*). Finally, the Rate Impact Measure Test ("RIM"), or non-participants test, indicates if rates increase or decrease over the long-run as a result of implementing the program. (Tr. Vol. 1, p. 369).

Witness Stevie testified that the results of the program analysis lead the Company to select the proposed portfolio of energy efficiency programs for which it seeks approval in this

docket.<sup>5</sup> (Tr. Vol. 1, p. 369-370). Dr. Stevie reported that in general, the programs pass the UCT and TRC cost-effectiveness tests, but not the RIM test. (Tr. Vol. 1, p. 370).

Both Witnesses Stevie and Hager testified that the 2007 Annual Plan results show that Duke Energy Carolinas' Energy Efficiency Plan, including the incentives under the Company's proposed energy efficiency programs, is cost-effective for customers. (Tr. Vol. 1, p. 365-367; Tr. Vol. 2, p. 642). In DSMore, the Company uses the actual and/or forecasted cost of the programs, as well as actual and/or expected load impacts, to measure their cost-effectiveness. (Tr. Vol. 1, p. 365-367; Tr. Vol. 2, p. 642). In contrast, for the IRP analysis, the projected revenues under Rider EE (SC) are used as program costs. (*Id.*). This is appropriate because this is the cost customers actually will incur for the programs if the Commission approves the Company's Application. (Tr. Vol. 2, p. 642).

The Company's emphasis on the programs that pass the UCT and are determined to be cost-effective in the context of the Company's IRP is appropriate. These analyses are more indicative of the programs' cost-effectiveness than other tests because they model how Rider EE (SC) will actually work and what customers will actually pay. Further, South Carolina law and Commission regulations do not require that prospective energy efficiency measures be found cost-effective under every metric; rather, a utility must show that proposed programs are consistent with its IRP and least cost planning principles. The IRP analysis indicates that the proposed energy efficiency programs are part of the "optimum" resource plan. (Tr. Vol. 2, p. 642).

<sup>&</sup>lt;sup>5</sup> Hearing Exhibit No. 5 – Stevie Exhibit No. 2 contains the cost-effectiveness test results for each program.

#### Avoided Cost Rate

Dr. Stevie testified that the avoided capacity costs are based upon the peaker methodology, as set forth in the Company's 2007 avoided cost filing in Docket No. 1995-1192-E, *In re: Proceeding for Approval of PURPA Avoided Cost Rates for Electric Companies* and approved in *Order Approving Revised Schedule PP (SC)*, Order No. 2007-591, dated August 23, 2007 ("PURPA Avoided Cost Order 2007-591"). The information on avoided hourly energy costs is obtained from the most recent Company IRP analysis. (Tr. Vol. 1, p. 365).

The Environmental Intervenors contend that basing the Company's compensation on a Public Utility Regulatory Policy Act of 1978 ("PURPA") avoided cost rate is not appropriate and not required by state law. They indicate that the PURPA rate allows Duke Energy Carolinas to base compensation on the cost of generation instead of what it would cost to deliver energy efficiency programs. (Tr. Vol. 2, p. 694). The peaker methodology has been thoroughly examined by the Commission on several occasions as part of avoided cost proceedings, including the Company's most recent avoided cost proceeding. It is reasonable for the Company to use the same methodology for calculating the avoided costs for its energy efficiency evaluations and Rider EE (SC). The Energy Efficiency Act gives the Commission broad authority to allow energy suppliers to recover costs and obtain a reasonable rate of return on their investment.

We conclude that it is appropriate for Duke Energy Carolinas to base the Company's compensation under the save-a-watt approach on its avoided costs for several reasons. First, the level of avoided costs will be determined consistent with the approved method already used by the Commission in its most recent proceedings setting avoided costs for the Company. *See* PURPA Avoided Cost Order 2007-591 and Order Ruling on Petitions, Order No. 96-570 (August 28, 1996).

It is both practical and reasonable to price capacity and energy savings on avoided cost rates set in accordance with PURPA. This methodology is subject to Commission review and approval. The rates are "formula rates" that are based on accepted ratemaking principles that date back to the enactment of PURPA in 1978. Inherent in the calculation of the rate is the concept of paying for "value received," which is measured based on the utility's avoided costs. Although the use of avoided costs as the basis for determining the utility's compensation is not required by state law, we conclude that it is permitted, and indeed best, to value saving watts (*i.e.*, energy efficiency) in a manner equivalent to the value of adding watts (*i.e.*, paying Qualifying Facilities). (Tr. Vol. 2, p. 526).

Secondly, the concept of providing an incentive to utilities for implementation of energy efficiency programs based upon a percentage of the savings (avoided costs) is the same in principle as a shared savings approach used in many jurisdictions across the country, including both South Carolina and North Carolina. The Commission allowed Duke Energy Carolinas to accrue shareholder incentives for load management in Order No. 91-1022. Pursuant to this Order, Duke Energy Carolinas booked rewards for DSM and energy efficiency programs, including load management programs in 1992, 1993, and 1994. These rewards were included in the Company's DSM Deferral Account for future recovery. The North Carolina Utilities Commission also authorized an identical measure for Duke Energy Carolinas. (Tr. Vol. 2, p. 659 & 662).

Like the save-a-watt model, the shared savings approach is also an avoided cost based mechanism. Under the shared savings approach, the utility recovers its program costs, lost margins, and a performance incentive comprised of a percentage of the avoided costs minus

program costs.<sup>6</sup> Thus, the save-a-watt and shared savings financial incentive mechanisms are very similar. The save-a-watt approach, which is a value-of-service compensation model, represents a natural evolution of the shared savings model, which is a hybrid of cost-of-service and value-of-service regulation.<sup>7</sup> Under the save-a-watt approach, customers face less risk because the utility bears the risk of recovering its program costs from the percentages of avoided costs; while under the shared savings method, the utility recovers the program costs directly. With the save-a-watt approach, the utility only gets paid for the energy efficiency results it delivers, *i.e.*, the energy efficiency impacts (kWh and kW) realized by customers as verified by an independent party. Customers only pay for energy efficiency resources that are delivered.

We agree with Duke Energy Carolinas that an avoided cost-based value-of-service model is a more appropriate energy-efficiency recovery mechanism than more traditional cost-plus models because energy efficiency activities are not asset-driven services like building and operating generating facilities; rather, energy efficiency is more akin to service-based business functions (e.g., helping customers control energy costs while minimizing impacts to their comfort or convenience). As a result, a value-of-service model that focuses on the results delivered to customers is more appropriate for determining the value, revenues, and returns obtained from energy efficiency than the traditional asset-focused, cost-of-service approach that regulates a utility's return on and of its investment in plant. Finally, the pay-for-performance

States that currently employ shared savings financial incentive models for energy efficiency include Oklahoma, which has approved program cost recovery, lost margins and a 25% shared savings financial incentive for Oklahoma Gas and Electric Company in Case No. 200800059 by the Oklahoma Corporation Commission in Order No. 556179 (July 2, 2008).

This evolution from shared savings to a purely avoided cost-based save-a-watt compensation model was recently completed in Ohio with the Public Utilities Commission of Ohio's ("PUCO") decision in Duke Energy Ohio, Inc.'s Application for Approval of an Electric Security Plan, Case No. 08-920-EL-SSO (December 17, 2008). The PUCO decision in that case approved a broad-based settlement reached among most of the parties, which included the Ohio Office of Consumer Counselor and two national environmental groups, the Natural Resources Defense Council and the Sierra Club.

aspect of the save-a-watt approach ensures that the Company has the proper incentive to innovate and deliver energy efficiency programs that yield results. (Tr. Vol. 1, p. 186). This, in turn, creates value for customers.

Duke Energy Carolinas has demonstrated through its IRP process and cost-effectiveness analyses that the proposed programs are an appropriate resource option for satisfying its customers' energy needs in an environmentally compatible and cost-effective manner. Therefore, the Commission concludes that the Company's proposed energy efficiency programs are cost-effective and consistent with Duke Energy Carolinas' 2007 IRP.

## Save-a-Watt Regulatory Model

### EVIDENCE FOR FINDING AND CONCLUSION No. 7

The Company's Energy Efficiency Plan is in the public interest and benefits the Company's customer body as a whole. The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witnesses Rogers, Ruff, Hager and Schultz.

It is not in dispute that an increased emphasis on energy efficiency is necessary. Even the Environmental Intervenors welcome Duke Energy Carolinas' effort to initiate a large-scale energy efficiency program in South Carolina and support the fundamental concept that a utility should receive a financial incentive sufficient to encourage the pursuit of all cost-effective energy efficiency. (Environmental Intervenors' Brief, p. 1). Given the current and expected future emissions reduction requirements, and the increasing concerns about climate change, it is essential that electric utilities fully utilize cost-effective energy efficiency options. As James Rogers, President and Chief Executive Officer of Duke Energy, explained, the electric utility industry continues to be subject to increasingly stringent emissions requirements which are only going to become more stringent in the future. (Tr. Vol. 1, p. 187). Witness Rogers testified that

unlike most supply-side resource options, energy efficiency is a "zero emissions" component of the Company's resource portfolio. (Tr. Vol. 1, p. 188). "Energy efficiency can be one of the most valuable pieces of the puzzle, because the most environmentally sound, cost-effective and reliable kilowatt of electricity may well be the one we do not have to generate," Rogers asserted. (Tr. Vol. 1, p. 187-188).

Witness Rogers also discussed how energy efficiency options are becoming relatively more cost-effective, and can play a more important role in terms of keeping the overall costs of electricity reasonable. (Tr. Vol. 1, p. 188). Customer demand for electricity in the Company's service territory is growing and the costs of providing the required supply-side resource options to meet this demand have been increasing significantly. (*Id.*). Witness Rogers testified that both the construction costs and the associated fuel costs have increased more rapidly than the overall rate of inflation in recent years. (*Id.*). The increasingly stringent emissions reduction requirements add additional costs to supply-side resource options, as well. (*Id.*). Witness Rogers concluded that given the pressures we face from increasing environmental compliance regulations, higher costs, and rising customer loads, the industry needs to more fully embrace and capitalize on energy efficiency. (Tr. Vol. 1, p. 188-189).

Ellen Ruff, President of Duke Energy Carolinas, testified that in the absence of significant energy efficiency contributions to reduce the Company's projected capacity needs, Duke Energy Carolinas will be required to build more new generation and purchase more power on the wholesale market as early as 2009. (Tr. Vol. 1, p. 120). The Company's customers will bear 100% of these costs. (*Id.*). In contrast, if Duke Energy Carolinas achieves significant energy efficiency under its proposed Energy Efficiency Plan, customers will realize an automatic savings of 15% of the Company's avoided generation costs. (*Id.*). Witness Ruff explained that

significant energy efficiency contributions will enable Duke Energy Carolinas to delay or avoid building future generating units required to meet the Company's projected capacity needs. (*Id.*).

Ms. Hager also explained the need for new capacity as outlined in the Company's 2007 IRP filed on November 15, 2007. (Tr. Vol. 2, p. 636-637). Inclusion of the proposed energy efficiency programs are part of the "optimum" resource plan. During the IRP analysis phase, portfolios including the energy efficiency proposals were lower cost to customers than those that included the Company's existing energy efficiency programs. (Tr. Vol. 2, p. 642-643).

Ms. Ruff testified that the Company's Energy Efficiency Plan will result in no rate increase for residential customers and a slight decrease for industrial customers in terms of absolute price per kilowatt-hour; however, this rate impact is less than the increase Duke Energy Carolinas would seek from customers if it were required to build new generation to meet the load avoided as a result of its energy efficiency programs. (Tr. Vol. 1, p. 111-112, 123). Further, those customers who choose to participate in the Company's energy efficiency programs should actually see their monthly bills go down. (Tr. Vol. 1, p. 123). Thus, all customers will benefit under the Company's proposed Energy Efficiency Plan approach to energy efficiency and those who actively participate in the energy efficiency programs will see even greater benefits. (*Id.*).

Company Witness Schultz testified that the Company has heard from customers and other stakeholders that they want Duke Energy Carolinas to do more around energy efficiency. (Tr. Vol. 1, p. 262). The Energy Efficiency Plan approach allows the Company to meet part of the increasing energy needs of South Carolina with fewer new generation facilities. (*Id.*).

Increased diversity of resources, greater energy security and reduced environmental impacts are in the public interest of the State of South Carolina. Duke Energy Carolinas' energy efficiency plan seeks to achieve these policy goals while reducing costs to customers for the

resources that would otherwise be needed to meet load growth. The Commission concludes that Energy Efficiency Plan, including Rider EE (SC) and the proposed portfolio of programs, is in the public interest.

## EVIDENCE FOR FINDING AND CONCLUSION No. 8

The save-a-watt approach, as an incentive mechanism, is consistent with the law and public policy of South Carolina, specifically, S.C. Code Ann. Section 58-37-20 (Supp. 2007). The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witnesses Rogers, Ruff and Hager.

Company Witness Rogers explained that a new approach to utility-sponsored energy efficiency is needed to stimulate investment and innovation in energy efficiency products and services and widespread customer participation. (Tr. Vol. 1, p. 186). The promotion and development of energy efficiency resources in South Carolina is consistent with the law and public policy of South Carolina.

When the South Carolina General Assembly adopted the South Carolina Energy Conservation and Efficiency Act of 1992 it declared that the policy of this State is to have a "comprehensive state energy plan that maximizes to the extent practical environmental quality and energy conservation and efficiency..." S.C. Code Ann. § 48-52-210 (Supp. 2007). Part of the Energy Efficiency Act enables the Commission to adopt procedures to encourage electrical utilities to invest in cost-effective energy efficient technologies and energy conservation programs. S.C. Code Ann. § 58-37-20 (Supp. 2007). These procedures must provide incentives and cost recovery for energy suppliers who invest in energy supply and end-use technologies that are cost effective, environmentally acceptable, and reduce energy consumption or demand. S.C. Code Ann. § 58-37-20 (Supp. 2007).

Energy efficiency is a "zero emissions" component of Duke Energy Carolinas' resource portfolio. The most environmentally sound, cost-effective, and reliable kilowatt of electricity is the one that the Company does not have to generate. (Tr. Vol. 1, p. 187-188). The Company's Energy Efficiency Plan proposes to implement a comprehensive set of cost-effective energy efficiency programs at a cost to customers of 85% of the avoided supply-side costs. The Company only would be paid for the actual demand and energy reduction impacts achieved. (Tr. Vol. 1, p. 194).

Under the Energy Efficiency Act, procedures adopted by the Commission to encourage energy efficiency must allow energy suppliers to recover costs and to obtain a reasonable rate of return on their investment in qualified demand-side management programs that are at least as financially attractive as construction of new facilities. S.C. Code Ann. § 58-37-20 (Supp. 2007).

Duke Energy Carolinas' Witness Ruff testified that the Energy Efficiency Plan is designed to produce energy and demand savings to help meet the Company's load obligations at an overall cost and environmental impact that are lower to customers than comparable supply-side investments. Customers only pay for results, *i.e.*, energy efficiency savings achieved by the Company and verified by a third party (Tr. Vol. 1, p. 123-124).

Pursuant to the Energy Efficiency Act, the procedures must establish rates and charges that ensure that the net income after implementation of specific cost-effective energy conservation measures is at least as high as it would have been if the measures had not been implemented. S.C. Code Ann. § 58-37-20 (Supp. 2007). Mr. Rogers testified that Duke Energy Carolinas' Energy Efficiency Plan implements a comprehensive set of cost effective energy efficiency programs for which the Company would be compensated through a rider that would be based on a percentage of the avoided fixed and variable supply-side costs. The Company

would only be paid for the actual demand and energy reduction impacts achieved through the programs. (Tr. Vol. 1, p. 194). The proposal encourages all cost-effective energy efficiency at a cost to customers that is lower than supply-side alternatives and provides comparable growth in earnings as would be achieved with supply-side investments. (Tr. Vol. 1, p. 194-195).

Company Witness Hager testified that Duke Energy Carolinas' resource planning process seeks to identify what actions the Company must take in order to have a portfolio of resources that provides adequate, reliable, reasonably priced service to customers. (Tr. Vol. 2, p. 637). Ms. Hager described how energy efficiency was incorporated into the 2007 Annual Plan. (Tr. Vol. 2, p. 640-641). In the screening phase of the resource planning process, the model selected the energy efficiency options as part of the preferred resource portfolio under all proposed scenarios. The portfolios of energy efficiency programs included in the Company's Energy Efficiency Plan are lower cost to customers than equivalent supply-side alternatives. (Tr. Vol. 2, p. 642-643).

Duke Energy Carolinas' 2007 Annual Plan, which includes the Energy Efficiency Plan, is consistent with the State's and this Commission's integrated resource planning principles. Although cost is a key component, it is not the only component in the Company's development of its resource plan. The basic objective of an IRP is to provide utility services at the lowest overall reasonable cost, consistent with service that is safe, reliable and in accord with all regulatory guidelines and the law. Duke Energy Carolinas' Energy Efficiency Plan appropriately balances the necessary regulatory principles, including least cost planning. The Plan offers energy efficiency programs at a reasonable cost to customers with projected capacity and energy savings that can be reasonably included in the Company's Annual Plan without jeopardizing the safe, reliable provision of electric service to customers.

To implement the state's energy efficiency and conservation policy, the General Assembly authorized the Commission to establish incentives and cost recovery and a reasonable rate of return for energy suppliers. The Commission concludes that the save-a-watt model advances the state's policy.

### EVIDENCE FOR FINDING AND CONCLUSION No. 9

Under the Energy Efficiency Plan approach, the Company assumes the risk that energy efficiency will not produce the expected results. Customers will not have to pay for energy efficiency programs that do not work. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Rogers, Farmer, Schultz, and Cicchetti.

Company Witness Rogers testified that under the Company's proposal, the utility makes the investments in energy efficiency up front and assumes the risk that the program will work – *i.e.*, that the utility can successfully implement programs, enroll customers, and produce actual energy and demand savings impacts. (Tr. Vol. 1, p. 193-194). The utility is only compensated for actual, verifiable energy and demand savings. (Tr. Vol. 1, p. 194). Although retail customers could benefit today if they invested in cost-effective alternatives that would reduce their electricity use, the truth is that many do not. As a result, Duke Energy Carolinas faces very real packaging, marketing, information, and sales costs to launch a new, massive and sustained energy efficiency business.

According to Company Witness Schultz, most approaches to energy efficiency pay utilities for their marketing, administration, program incentives and measurement and verification expenses regardless of the energy efficiency impacts they achieve. (Tr. Vol. 1, p. 250). Under the Company's proposed save-a-watt approach the utility takes on the risk of recovering these investments in

exchange for the opportunity to earn an incentive if it is successful in the design, marketing, and implementation of its energy efficiency programs. (Tr. Vol. 1, p. 250-252).

Company Witness Stephen Farmer described the Company's Energy Efficiency Plan as a "pay-for-results plan." (Tr. Vol. 2, p. 524). The Company will only be paid if it is able to deliver results. (*Id.*). According to Mr. Farmer, if the Company is not able to achieve projected savings on behalf of customers, or if the Company exceeds its cost budget, then earnings will suffer. (*Id.*).

Company Witness Cicchetti testified that the Company is compensated when its energy efficiency programs are successful in reducing energy consumption and it is able to keep costs low. There is no true up or ability for Duke Energy Carolinas to recover money that it spends for programs that do not work. (Tr. Vol. 2, p. 900).

The amount of money that the Company may collect under the energy efficiency rider depends on the success of the programs. The Company is compensated when its energy efficiency programs succeed in reducing energy consumption and it is able to keep costs low. There is no true up or ability for Duke Energy Carolinas to recover money that it spends for programs that do not work. Duke Energy Carolinas has every incentive to implement all cost-effective energy efficiency programs and to maximize those results since the Company is paid only for results. As a result, the Commission concludes that Duke Energy Carolinas assumes the risk that the proposal will not produce the expected results.

### EVIDENCE FOR FINDING AND CONCLUSION No. 10

The current regulatory approach to energy efficiency programs fails to put energy efficiency on a level playing field with supply-side options. The save-a-watt approach levels the playing field by giving Duke Energy Carolinas the opportunity to earn comparable earnings and achieve comparable growth in earnings for energy efficiency as the Company would for supply-

side investment which encourages the pursuit of all cost-effective energy efficiency. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Rogers, Sadowsky, Cicchetti, Rose, and Farmer.

Company Witness Rogers provided testimony on the necessity of adopting a different regulatory approach to energy efficiency. Mr. Rogers pointed out that under the current regime, utilities generally have an opportunity to achieve earnings on their supply-side investments, yet the opportunity to achieve the same level of earnings is typically not available for demand-side investments. (Tr. Vol. 1, p. 189). Instead, the conventional regulatory treatment for demand-side investments consists of actual, out-of-pocket cost recovery, and perhaps lost revenue recovery and/or a shared savings incentive. (*Id.*) Additionally, unlike supply-side options, energy efficiency programs actually reduce utilities' energy sales, providing a natural disincentive for fully capitalizing on energy efficiency. (*Id.*).

Witness Rogers testified that in order to encourage the pursuit of all cost-effective energy efficiency, regulatory models must truly put energy efficiency on a level playing field with supply-side options. (Tr. Vol. 1, p. 191 & 351). Regulatory models need to recognize that as energy savings increase, electricity sales will diminish (as will generation additions). Therefore, it is important that regulatory models mitigate or neutralize the financial consequences from the successful implementation of energy efficiency programs that reduce energy. (*Id.* at p. 191).

Company Witness Jane Sadowsky explained why utility incentives are necessary to encourage investment in energy efficiency. Ms. Sadowsky testified that historically, utilities have been compensated for their investments in energy efficiency projects based on cost recovery of the utilities investments and/or lost revenue recovery and a share of the savings created. (Tr. Vol. 1, p. 99). Jurisdictions characterized by these types of compensation

mechanisms have significantly lagged behind jurisdictions that incorporate some manner of affirmative incentive for energy efficiency programs in both per capita expenditures for energy efficiency and in the results obtained. (Tr. Vol. 1, p. 99-100). Witness Sadowsky testified that the save-a-watt proposal rectifies this problem by creating incentives. (Tr. Vol. 1, p. 100).

Ms. Sadowsky testified that the Company's Energy Efficiency Plan enables the utility to generate earnings that are comparable to an investment in supply-side resources, by valuing the energy efficiency contribution of save-a-watt based on the avoided cost of the supply-side resource. (Tr. Vol. 1, p. 99). According to Ms. Sadowsky, an opportunity to generate an earnings stream comparable to what a utility would earn from a power plant investment is important because otherwise, utilities will prioritize supply-side projects, which are allowed a regulatory rate of return on investment as well as cost recovery of expenditures, over opportunities that allow cost recovery and/or lost revenue recovery only. (Tr. Vol. 1, p. 102). In order for companies to allocate an appropriate share of capital to energy efficiency programs, the programs will need to generate earnings that are comparable in both size and amount to a utility's alternate use of capital (e.g., supply-side resources). (Tr. Vol. 1, p. 104).

Company Witness Charles Cicchetti testified that traditional cost-of-service regulation fails to adequately address energy efficiency, a value service. Dr. Cicchetti explained that as long as electric utilities build power stations and sell the kilowatt-hours produced, traditional cost-of-service regulation works relatively well. (Tr. Vol. 2, p. 896-897). However, most energy experts recognize that energy efficiency is a "value" service, meaning that it is often very cost-effective for consumers and society broadly to replace kilowatt-hours with energy efficiency. (Tr. Vol. 2, p. 897). According to Witness Cicchetti, the challenge for regulators is determining how to graft energy efficiency onto a traditional build, own, and operate vertically integrated

efficiency a reasonably priced alternative, using a value of service framework. (Tr. Vol. 2, p. 897-898) According to Dr. Cicchetti, the save-a-watt compensation model accomplishes this by aligning the consumer benefits along with strong shareholder support and incentives to utilize value of service principles to expand energy efficiency onto cost-of-service regulation using integrated resource planning, avoided cost, regulated revenue requirements and rate riders. (Tr. Vol. 2, p. 898).

Company Witness Judah Rose testified that despite a high potential for energy efficiency, significant amounts of energy efficiency have not yet been achieved. (Tr. Vol. 1, p. 44-45). He attributed the lack of more energy efficiency in part to disincentives for utilities to invest in energy efficiency activities that do not contribute to earnings or earnings growth, and that decrease sales. (Tr. Vol. 1, p. 47). Mr. Rose testified that in most states with significant customer energy efficiency programs, there are now formal utility incentives for energy efficiency. (Tr. Vol. 1, p. 48). However, unlike the save-a-watt model, none of these other approaches have proposed totally divorcing incentives from costs or placed as much emphasis on having the utility absorb the risks of higher costs or less than expected energy efficiency savings. (Tr. Vol. 1, p. 48-49. Alternative approaches that utilize incentives, but rely on traditional regulatory mechanisms and are cost-oriented rather than value-oriented, have thus far left a large gap between estimated energy efficiency potential and achieved savings. (Tr. Vol. 1, p. 49).

Environmental Intervenor Witnesses Nichols and Atkins testified that Duke Energy Carolinas' Energy Efficiency Plan proposal is not a proper or reasonable regulatory paradigm. (Tr. Vol. 2, p. 761 & 838-840). For example, Environmental Intervenor Witness Nichols criticized the Company's Energy Efficiency Plan for departing from the existing cost-of-service

ratemaking framework. (Tr. Vol. 2, p. 761). Dr. Cicchetti responded that cost-of-service is not the only accepted regulatory paradigm and that cost-of-service does not fit very well in terms of pricing energy efficiency. (Tr. Vol. 2, p. 897-898). Dr. Cicchetti explained that regulatory methods have changed and evolved over time to meet the unique circumstances of the times, and that the nation is facing many new energy, economic and environmental challenges. (*Id.*). He testified that the Commission should not apply cost-of-service to energy efficiency simply because that has been the regulatory norm for the past fifty years, and that value of service regulation is due for resurgence as energy efficiency becomes increasingly important. (Tr. Vol. 2, p. 897).

Environmental Intervenor Witnesses Knapp, Wilson, and Nichols testified that the company would earn too much under the save-a-watt model. Mr. Knapp testified that the rate of return on the Company's investment was excessive in comparison to other utilities and that customers would pay more for energy efficiency under the save-a-watt model on a per kWh basis than for generation. (Tr. Vol. 2, p. 488). Mr. Wilson contended that the save-a-watt approach ensures that Duke Energy Carolinas' share of net benefits exceeds 100% which will injure South Carolina customers. (Tr. Vol. 2, p. 793). Mr. Nichols testified that the Company's proposed energy efficiency approach was fundamentally flawed because the rate proposal does not base utility cost recovery for load management or conservation programs upon the costs actually incurred by the utility. Dr. Cicchetti testified that the Company's proposal has been designed to actually succeed where past efforts have largely failed to sustain after public support wanes. The Plan's seminal breakthrough is to allow the utility to earn money from a new utility service that helps its customers reduce energy use. The Company's approach helps Duke Energy Carolinas

and its retail customers to find a profitable balance between electricity (kWh) and economic efficiency. (Tr. Vol. 2, p. 895-897).

The Company has demonstrated that the cost of its Energy Efficiency Plan to customers is fair. Rider EE (SC) will have a very modest impact on the rates of Duke Energy Carolinas' South Carolina customers. (Tr. Vol. 2, p. 539). The Company's original proposal included a provision whereby base rates for all customers would be reduced to eliminate the DSM charge of \$0.000811 currently included in the rates. The Duke-ORS Settlement provides for the flow-through of the accumulated DSM Balance to Residential, General Service and Lighting customers which will be used to offset, in its entirety, amounts recoverable under Rider EE (SC), net of the base rate credit, until the accumulated DSM Balance allocated to Residential, General Service and Lighting customers has been completely returned. The flow-through of the accumulated DSM deferral balance to Industrial customers will be used to offset amounts recoverable under Rider EE (SC) without regard to the base rate credit of \$0.000811. The Company proposes that the accumulated DSM deferral balance be flowed through to customers through a newly created rate decrement adjustment mechanism as reflected in the table below which shows the net charge to customers after all credits.

| CUSTOMER<br>CLASS | ANNUAL RIDER EE (SC) CHARGE PER KWH AS PROPOSED BY THE COMPANY | BASE RATE CREDIT DUE TO ELIMINATION OF THE DSM CHARGE CURRENTLY INCLUDED IN RATES | FLOW-<br>THROUGH OF<br>ACCUMULATED<br>DEFERRED DSM<br>COSTS | NET<br>CUSTOMER<br>CHARGE PER<br>KWH AFTER<br>CREDITS |
|-------------------|--|---|---|---|
| Residential       | \$0.001586   | \$(0.000811)  | \$(0.000775)  | \$0.000000  |
| General Service   | \$0.000984   | \$(0.000811)  | \$(0.000173)  | \$0.000000  |
| Industrial        | \$0.000665   | \$(0.000811)  | \$(0.000665)  | \$(0.000811)  |

(Tr. Vol. 2, p. 548-549). Because the save-a-watt model places the risk of non-performance upon the Company, whether the Company retains the revenues generated by the rider is dependent upon its producing verified and measured energy savings. Likewise, whether the revenues actually retained generate earnings is dependent upon the Company adequately controlling its costs and attracting participation in its energy efficiency programs.

The Environmental Intervenors complained that the save-a-watt model will cost too much for customers, earn too much for the Company, and achieve too little. Environmental Intervenor Witness Nichols testified that Duke Energy Carolinas will not have a financial incentive to pursue extensive energy conservation under the Company's proposal. (Tr. Vol. 2, p. 767) Dr. Cicchetti testified that, to the contrary, because Duke Energy Carolinas will be paid for achieving actual energy efficiency results, the save-a-watt approach has built-in incentives to save more, not less. (Tr. Vol. 2, p. 906-907).

The Company has demonstrated that formal incentives are needed to promote aggressive pursuit of energy efficiency opportunities. The save-a-watt regulatory approach provides

appropriate incentives to overcome the natural disincentive for utilities to invest in energy efficiency. The Commission concludes that the save-a-watt regulatory approach is a reasonable method to encourage the pursuit of all cost-effective energy efficiency.

#### **Energy Efficiency Portfolio**

#### **EVIDENCE FOR FINDING AND CONCLUSION Nos. 11 and 12**

Duke Energy Carolinas properly applied for Commission approval of its portfolio of energy efficiency programs in compliance with the Commission's filing requirements. S.C. Code Ann. Section 58-37-20 (Supp. 2007) provides for cost recovery and incentives for the proposed demand-side programs and energy efficiency programs. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Hager, and Farmer.

Before Duke Energy Carolinas may implement any new or modified programs, the Company must obtain Commission approval by filing its proposal with the Commission pursuant to S.C. Code Ann. Sections 58-27-820 and 870 (Supp. 2007). The information provided in response to the Commission's filing requirements can be found in the testimony and exhibits of Company Witnesses Schultz and Farmer. (Tr. Vol. 1, p. 255-261 & Vol. 2, p. 522-526). Duke Energy Carolinas' Witness Hager discussed how the energy efficiency programs were reflected in the Company's 2007 Annual Plan. (Tr. Vol. 2, p. 640-644). The proposed tariff pages for the energy efficiency programs described during the hearing were filed with the Commission on November 21, 2008. The finding that Duke Energy Carolinas has met all the filing requirements with respect to its portfolio of energy efficiency programs was not disputed by any party.

Pursuant to S.C. Code Ann. Section 58-37-20 (Supp. 2007) the Commission may adopt procedures to encourage electrical utilities to invest in cost-effective energy efficient

technologies and energy conservation programs. If adopted, these procedures must provide incentives and cost recovery for energy suppliers who invest in energy supply and end-use technologies that are cost-effective, environmentally acceptable, and reduce energy consumption. Energy suppliers are allowed to recover costs and obtain a reasonable rate of return on their investment to make these programs at least as financially attractive as construction of new generation facilities. S.C. Code Ann. § 58-37-20 (Supp. 2007).

# EVIDENCE FOR FINDING AND CONCLUSION No. 13

The proposed Residential Energy Assessments program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Witness Schultz testified that Residential Energy Assessments are designed to help residential customers identify opportunities to use energy more efficiently through mailin analysis, on-line analysis, and on-site energy audit. (Tr. Vol. 1, p. 256 & Hearing Exhibit 4, p. 1-2). Participating customers will receive either an energy efficiency kit or compact fluorescent light bulbs at the time of the audit. (*Id.*). The finding that the Residential Energy Assessments program meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. The Commission concludes that the proposed Residential Energy Assessments program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

#### EVIDENCE FOR FINDING AND CONCLUSION No. 14

The proposed Residential Smart \$aver Program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Mr. Schultz testified that the Residential Smart \$aver Program will provide residential customers with incentives to install more energy-efficient, ENERGY STAR® certified equipment, such as compact fluorescent light bulbs, refrigerators, clothes washers and dryers, and high-efficiency air conditioners and heat pumps. (Tr. Vol. 1, p. 256, 297-298 & Hearing Exhibit 4, p. 3-4). The finding that the Residential Energy Assessments program meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. The Commission concludes that the Residential Smart \$aver program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

### **EVIDENCE FOR FINDING AND CONCLUSION No. 15**

The proposed Low Income Energy Efficiency and Weatherization Assistance program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Witness Schultz testified that the Low Income Energy Efficiency and Weatherization Assistance Program will assist low income residential customers with energy efficiency measures or through assistance in purchasing equipment and weatherizing homes. (Tr. Vol. 1, p. 256-257, 297). The program consists of two components: the

Weatherization and Equipment Assistance component provides weatherization services and refrigerator replacement to qualifying customers, while the Energy Efficiency Products component involves the distribution of starter kits. (Hearing Exhibit 4, p. 5). The finding that the Residential Energy Assessments program meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. The Commission concludes that Duke Energy Carolinas' Low Income Energy Efficiency and Weatherization Assistance Program is in the public interest.

# EVIDENCE FOR FINDING AND CONCLUSION No. 16

The proposed Energy Efficiency Education Program for Schools is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. The Energy Efficiency Education Program for Schools is designed to educate students about energy efficiency through energy efficiency curriculum, Duke Energy Carolinas' online home audit and on-site school audits. (Tr. Vol. 1, p. 297 & Hearing Exhibit 4, p. 6). Eligible students will receive an energy efficiency kit or compact fluorescent light bulbs. (*Id.*). The finding that the Energy Efficiency Education Program for Schools meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. The Commission concludes that the Company's Energy Efficiency Education Program for Schools is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

#### EVIDENCE FOR FINDING AND CONCLUSION No. 17

The proposed Power Manager program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Mr. Schultz explained that Power Manager will enable residential customers to receive a monthly credit from July to October in exchange for allowing Duke Energy Carolinas to cycle their central air conditioning systems in times of peak power demand and to interrupt the central air conditioning when the Company has more severe capacity constraints. (Tr. Vol. 1, p. 257 & Hearing Ex. 4, p. 7). Witness Schultz compared the proposed Power Share Program to the existing Rider LC. (Tr. Vol. 1, p. 326-328).

Demand-response programs provide value towards the ability to achieve least-cost solutions under the Company's IRP. Without these options, Duke Energy Carolinas would be required to build new generation rather than implement efficiency programs. Such a result also would require customers to pay more than necessary for the Company to develop adequate resources to meet future customer demand. Thus, there is significant value in both types of programs in any energy efficiency filing in order to lower the total potential future costs to customers by avoiding the need to add all types of additional generation resources. Accordingly, the Commission concludes that the proposed Power Manager program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

### EVIDENCE FOR FINDING AND CONCLUSION No. 18

The proposed Non-Residential Energy Assessments program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-

27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Mr. Schultz testified that Non-Residential Energy Assessments are designed to help commercial and industrial customers identify opportunities to use energy more efficiently through online analysis, telephone interviews, and on-site energy audits. (Tr. Vol. 1, p. 256 & Hearing Ex. 4, p. 8). The finding that the Non-Residential Energy Assessments Program meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. The Non-Residential Assessment Program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

### EVIDENCE FOR FINDING AND CONCLUSION No. 19

The proposed Non-Residential Smart \$aver program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Mr. Schultz testified that the Non-Residential Smart \$aver program will provide incentives to install high-efficiency lighting, HVAC equipment, motors, and pumps. (Tr. Vol. 1, p. 256, 298 & Hearing Exhibit 4, p. 9). The finding that this program meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. The Non-Residential Smart \$aver program is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

#### EVIDENCE FOR FINDING AND CONCLUSION No. 20

The proposed PowerShare® program is in the public interest and eligible for recovery through a rider or incentives under S.C. Code Ann. Sections 58-27-820, 58-27-870, and 58-37-20 and 26 S.C. Reg. 103-303. The evidence in support of this finding is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Schultz, Stevie, Hager and Farmer. Witness Schultz testified that PowerShare® will enable non-residential customers to receive a credit on their bills in exchange for reducing their electric use in times of peak power demand or unexpected capacity or other operational constraints. (Tr. Vol. 1, p. 257, 298 & Hearing Exhibit 4, p. 10). The program includes both a mandatory option under which customers receive a capacity and energy credit and a voluntary option under which customers receive an energy credit for load curtailed. (Hearing Ex. 4, p. 10). The finding that this program meets all the filing requirements and standards for approval under S.C. Code Ann. Sections 58-37-20, 58-27-820, 58-27-870 and 26 S.C. Regs. 103-303 and 103-312(2)(A) was not disputed by any party. PowerShare® is in the public interest and will benefit Duke Energy Carolinas' customer body as a whole.

#### **EVIDENCE FOR FINDINGS AND CONCLUSIONS Nos. 21-24**

It is in the public interest to close the following Duke Energy Carolinas existing programs to new customers and to transition existing customers to new proposed programs: Rider IS, Rider SG, Rider LC, and Residential Housing Program. The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witness Schultz.

Witness Schultz testified that Duke Energy Carolinas' current demand-response programs are more than 20 years old and have been virtually unchanged in more than 10 years. (Tr. Vol. 1, p. 258). Mr. Schultz explained that based on customer research and the experience

developed from operating these programs, the Company believes customer adoption, satisfaction, and acceptance of demand-response programs can be improved. (*Id.*). For example, residential customers traditionally have been unhappy when the Company uses its air conditioning load control system because it temporarily can suspend the customer's usage of the unit during very warm weather. (*Id.*). To remedy this issue, the Company proposes to introduce and expand load reduction mechanisms that limit the temperature impact a customer might experience. (*Id.*). Witness Schultz testified that non-residential customers also have expressed a desire for a viable voluntary curtailment option, an increase in credits paid for firm curtailment, and some standardization between curtailment programs for standby emergency generators and firm interruptible load. (*Id.*). The Company has addressed each of these issues in the new portfolio of proposed programs. (Tr. Vol. 1, p. 258-259). Witness Schultz testified that the Company is looking to cancel these existing programs and roll them into new programs which they believe will improve customer acceptance and satisfaction based on the feedback received from customers. (Tr. Vol. 1, p. 283).

In connection with the implementation of the proposed portfolio of energy efficiency programs, the Company requests approval to cancel Riders IS, SG, and LC, as well as the Existing Residential Housing Program. (Tr. Vol. 1, p. 260). Riders IS and SG will be replaced in the new portfolio with PowerShare®. (*Id.*). Rider LC will be replaced in the new portfolio with Power Manager. (*Id.*). The Existing Residential Housing Program is being replaced by the Smart \$aver program, which offers customers incentives and can be administered centrally across all five states in which Duke Energy operates. (*Id.*). No party objected to these proposals.

Duke Energy Carolinas has developed new programs that use new technology designed to combat the problems with existing programs identified by the Company and its customers.

The Commission concludes that, in connection with the implementation of the proposed portfolio of energy efficiency programs, it is in the public interest to close Riders IS, SG, LC, and the Residential Housing Program and Special Needs Energy Load Program.

#### **Settlements**

#### EVIDENCE FOR FINDING AND CONCLUSION No. 25

The Duke-ORS Settlement Agreement is just, reasonable, and in the public interest. The evidence in support of this finding is based upon the exhibits and testimony of Duke Energy Carolinas Witnesses Ruff and Farmer. Duke Energy Carolinas, ORS, SCEUC, and Wal-Mart entered into a Settlement Agreement filed with the Commission on January 29, 2008. The Environmental Intervenors opposed the motion to approve the settlement at the hearing indicating they did not have adequate time to respond prior to the hearing. (Tr. Vol. 1, p. 18-20). The Environmental Intervenors presented the testimony of James Atkins in response to the Duke-ORS Settlement. (Tr. Vol. 2, p. 874-885).

We have reviewed the Environmental Intervenors' response opposing the motion to approve the Duke-ORS Settlement ("Environmental Intervenors' Settlement Response"). In this response they contend that the settlement is not in the public interest as a whole and they address several provisions discussed below. Duke Energy Carolinas and ORS filed replies to the Environmental Intervenors' Settlement Response on February 21, 2008 (respectively "Duke Energy Carolinas' Settlement Reply" and "ORS Settlement Reply").

The Duke-ORS Settlement Agreement includes certain provisions to afford further review of the plan after it is in effect. These provisions serve as a safety valve while still allowing the Company the flexibility to vigorously pursue its energy efficiency plan. The Settlement Agreement includes the following provisions:

# Opt-Out for Large Customers

Ms. Ruff testified about the substantive provisions of the Duke-ORS Agreement. The first provision found in paragraph 3 allows large commercial and industrial customers whose maximum annual peak load demands exceed either (i) 3,500 kW for individual accounts, or (ii) 6,000 kW for the aggregated accounts of the customer and its affiliates, to opt out of the energy conservation portion of the Rider EE (SC). The customer must certify that it has performed an energy audit within the three year period preceding the opt out request and has implemented or has plans to implement the cost-effective measures recommended in the audit. The opt out applies only to the conservation portion of the Rider EE (SC) and applies to the Company's entire portfolio of energy efficiency programs. Once a customer participates in the conservation portion, the customer cannot later chose to opt out of that portion for a period of five years or the life of the applicable measure, whichever is longer. If a customer terminates its participation in the conservation portion prior to this period, the customer must pay a termination charge. (Tr. Vol. 1, p. 139-140, 148-149, 547). See also Order Exhibit 1, p. 2-4.

In the Environmental Intervenors' Settlement Response they agree in principle that an opt out provision for large customers may be appropriate. Environmental Intervenors' Settlement Response ¶ 6. The Environmental Intervenors contend that the Duke-ORS Settling Parties have not submitted sufficient evidence that the opt-out provision is in the public interest and suggest that a program that provides a performance-based rate discount incentive equal to the Rider EE(SC) would be a better alternative. Environmental Intervenors' Settlement Response, ¶ 4-6. Their specific concern related to the customer self-certification. Environmental Intervenors' Settlement Response ¶ 5. The Duke Energy Carolinas' Settlement Reply explained that because the customers stand to achieve significant energy efficiency gains under the proposed programs

there is very little incentive for a customer to intentionally commit fraud in an effort to opt out. The fundamental advantage of the plan is that it motivates both customers and the utility to achieve all cost-effective energy efficiency. Duke Energy Carolinas' Settlement Reply, p. 3-4.

The opt-out thresholds and criteria contained in the Duke-ORS Settlement Agreement are reasonable and in the public interest. Although the opt-out eligibility criteria in the Settlement Agreement provide general service and industrial customers that have implemented self-directed energy efficiency programs the ability to opt out, these customers must first attest that they have completed an energy assessment in the past three years and are working to implement energy efficiency programs. The provisions of the Duke-ORS Settlement Agreement are more stringent than the opt-out thresholds in effect in the Company's North Carolina retail jurisdiction. In addition to having a lower opt-out threshold for general service, the North Carolina rules also impose no requirement that the customer complete a recent energy usage assessment. Thus, the Settlement Agreement represents an opt-out compromise that is not only narrowly tailored to achieve the objective intended—that is, to recognize the self-directed energy conservation efforts of the Company's larger commercial and industrial customers — but is sufficiently vigorous to require that an energy audit be performed to serve as the basis for the customer's self-directed activities.

# Cost Allocation Methodology

The Duke-ORS Settlement Agreement also alters the cost allocation methodology originally proposed to provide that costs associated with demand response energy efficiency

Pursuant to N.C. Gen. Stat. 62-133.9(f) and North Carolina Utilities Commission ("NCUC") Rule R8-69(d), industrial accounts of any size and large commercial accounts that use more than 1 million kWh in the prior calendar year, may elect to opt out of participating in the demand-side management (DSM)/energy efficiency (EE) programs and avoid paying the charges if, at their own expense, they have implemented in the past or plan to implement in the future, alternative DSM/EE measures in accordance with stated, quantifiable goals. General service consuming less than 1 million kWh in the prior calendar year and residential customers are not eligible to opt out.

programs will be allocated among all customer classes based on the class' contribution to the Company's firm peak demand. For energy conservation/efficiency programs, non-residential customers will pay for non-residential programs and residential customers will pay for residential programs. Order Exhibit 1, p. 4,  $\P$  4.

The Settlement Agreement provides that the allocations among customer classes for demand response programs will be calculated in the same manner as those provided for under the Base Load Review Act. *Id.* 

All variable environmental costs included in fuel costs shall be recovered from each class of customers as a separate environmental component of the overall fuel factor. The specific environmental component for each class of customers shall be determined by allocating such variable environmental costs among customer classes based on the utility's South Carolina firm peak demand data from the prior year.

# S.C. Code Ann. 58-27-865(A)(1) (Supp. 2007).

Duke Energy Carolinas' Witness Farmer explained the change in allocation methodology. (Tr. Vol. 2, p. 546 -547). The revenue requirements for all demand response programs were allocated to South Carolina retail customers based on the percentage of South Carolina retail energy sales to total retail energy sales. This same method is used for conservation programs. Once a South Carolina allocation of the demand response revenue requirements was calculated in this manner, the South Carolina-allocated portion of the demand response revenue requirements was allocated to the customer classes on the basis of the applicable customer class' contribution to South Carolina firm peak demand from 2006. (Tr. Vol. 2, p. 546-547).

Witness Ruff explained why demand response program costs should be allocated across all customers based on their respective contributions to the company's firm peak demand. (Tr. Vol. 1, p. 141-142, 149-150). This allocation acknowledges the system wide benefits generated

by participation in demand response programs by non-residential customers. (Tr. Vol. 1, p. 140-141). Demand response programs allow Duke Energy Carolinas to shed load at times of peak demand—usually driven in the summer by increases in residential demand. (Tr. Vol. 1, p. 141-142).

# Demand Side Management ("DSM") Balance Return to Customers

Paragraph 5 of the Duke-ORS Settlement Agreement addresses the return of the DSM Deferral Account balance. Currently in South Carolina, Duke Energy Carolinas is required to defer the difference between the DSM amounts it collects from customers, which is approximately \$18 million each year, and what the Company spends to deliver DSM programs. The DSM account was established pursuant to Commission direction to ensure that customers would not be overcharged or undercharged. Any difference between collections and expenditures are reflected in the deferral account for future return to customers with interest. This deferral requirement over time has resulted in an over collection of DSM amounts by Duke Energy Carolinas from customers of approximately \$87 million as of November 30, 2007. According to the Company, since November 30, 2007, the DSM Balance liability has been growing at a rate of approximately \$5 million per quarter. (Tr. Vol. 2, p. 603).

The Duke-ORS Settling Parties agreed that (i) the current collection for DSM costs of \$0.000811/kWh will be replaced by the approved Rider EE (SC) amounts, and (ii) the DSM Balance, including accrued interest at the currently approved rate, will be calculated by customer class and those customer class balances will be returned to each customer class as described below until the DSM Balance is zero by class, or until the Company's next base rate case, whichever occurs first. For Residential, General Service, and Lighting customers the DSM Balance will be used to implement a rate decrement equal to the increment resulting from the

difference between the current DSM collection in rates and the demand response and conservation factors comprising the annual Rider EE (SC) rate. For industrial customers the DSM Balance will be used to implement a rate decrement equal to the demand response and conservation factors comprising the annual Rider EE (SC) rate increment. In calculating the amount of the existing DSM Balance, which is credited to each class of customers, the Parties agreed that costs of delivering DSM programs prior to implementation of Rider EE (SC) should be assigned to the classes based on actual payments made to customers and all of the DSM Balance for each respective class would be returned to that respective class. Order Exhibit 1, p. 4-5. (Tr. Vol. 1, p. 142-143, 150-151 & Vol. 2, p. 547-549).

The Environmental Intervenors contend that no testimony or evidence was offered to show that this provision is in the public interest and that the return of the DSM Balance should not be tied to the Energy Efficiency Plan program. Environmental Intervenors argue that the return of the DSM Balance should be addressed in another proceeding. Environmental Intervenors' Brief, p. 7.

Because the Application proposes closing the existing DSM programs and removing the DSM factor from rates to implement the new plan, it is appropriate to address the DSM deferral account balance in this proceeding. (Tr. Vol. 1, p. 143). Company Witness Ellen Ruff specifically outlined the benefits of the proposed return of the DSM Balance in her testimony. (Tr. Vol. 1, p. 144). The Duke-ORS Settlement Agreement provides an opportunity to implement the Company's Energy Efficiency Plan without any rate increase to the Company's customers prior to the two year review.

# Reduction on Percentage of Avoided Costs

The Duke-ORS Settlement Agreement provides that the Company be compensated for investments in energy efficiency at 85% of avoided generation costs rather than 90% as proposed by the Company. Order Exhibit 1, p. 5, ¶ 6. (Tr. Vol. 1, p. 143-144, 151-152,; Vol. 2, p. 548-549). The Environmental Intervenors contend that the five percent reduction does not mitigate their concern that the avoided cost compensation is not in the public interest. The Environmental Intervenors contend that there is no support in the record for the appropriateness of the 85% figure and that the avoided-cost based mechanism would allow Duke Energy Carolinas to capture too large a share of the cost savings from energy efficiency. Environmental Intervenors' Brief, p. 6-7. The Company asserts that the avoided costs are a direct measure of value to customers. The value to all customers—participants and non-participants—is the avoided cost of generation. In addition, the Company's review is tied to the results it achieves. Duke Energy Carolinas' Settlement Reply p. 6-7. Witness Ruff testimony specifically supports that this provision of the settlement is in the public interest. The reduction of compensation to 85% of avoided generation costs will enable customers to pay 15% less than they would have been charged based on the incremental cost of avoided generation and capacity. (Tr. Vol. 1, p. 144). Because the Company is compensated on 85% of avoided generation costs, by definition a customer's bill is going to be lower than paying 100% of the cost of generation. The focus of the Energy Efficiency Plan is on being paid for results. If Duke Energy Carolinas does not deliver the value to customers and they do not participate, the Company does not get paid. (Tr. Vol. 1, p. 282 & 306-307).

# Two Year Review of the Company's Energy Efficiency Plan

The Duke-ORS Settlement Agreement provides for a two year review of the Energy Efficiency Plan. On the second anniversary of the effective date of Rider EE (SC), ORS may (i) conduct a full review and evaluation of the Company's Energy Efficiency Plan pursuant to its authority under S.C. Code Ann. Section 58-4-50(A)(1) and (2) (Supp. 2007), and (ii) make recommendations regarding any changes, corrections or amendments to the Company's Energy Efficiency Plan that ORS deems to be in the public interest consistent with the Energy Efficiency Act. Duke Energy Carolinas must cooperate fully in such review and evaluation. Duke Energy Carolinas may oppose changes proposed by ORS or seek revisions or amendments to the Energy Efficiency Plan. Any party may oppose the continuation of the plan or to seek revisions or amendments to the plan. Order Exhibit 1, p. 6. Ms. Ruff explained that the purpose of the two year review provision of the settlement was to afford an opportunity to make necessary improvements early in the implementation process which benefits customers. (Tr. Vol. 1, p. 144-145, 152). The two year provision is a safeguard against the "overcompensation" concerns expressed by the Environmental Intervenors. After the initial implementation period of two years, any Party may oppose continuing the plan or seek revisions or amendments.

### **Quarterly Reports**

The Duke-ORS Settlement Agreement provides that Duke Energy Carolinas will account for the impacts of the proposed save-a-watt regulatory treatment on energy efficiency revenues in its Quarterly Reports as follows: the Company will include (a) revenues earned through Rider EE (SC), and (b) expenses calculated at 85% of the avoided generation costs as calculated in Rider EE (SC). Order Exhibit 1, ¶ 9. Actual program costs for the reporting period will be included for information purposes as a footnote in the Reports. Duke Energy Carolinas will not

seek to recover program costs in addition to 85% of the avoided generation costs calculated in Rider EE (SC). Order Exhibit 1, p. 6-7. These reports provide transparency to the Company's earnings and expenses, and create sufficient oversight of the program.

Duke Witness Ruff testified that the purpose of this change was to make clear that the Company is not seeking to recover the higher of its program costs or 85% of the avoided generation costs. (Tr. Vol. 1, p. 146, 152-153) (See also Tr. Vol. 2, p. 617-618). The quarterly reports and annual reviews will enable a review of revenues collected under the rider, expenses calculated at 85% of the avoided generation costs, and the actual program costs. The oversight of the program mitigates the risk of any overcompensation.

# Response Time

Paragraph 10 provides that ORS and other parties of record shall have a period of one hundred and twenty (120) days to respond to the Company's proposed analysis report of the first Evaluation period and for the amount of the Rider EE (SC) that will be in effect for the following year. Order Exhibit 1, p. 7. (Tr. Vol. 1, p. 146-147).

### Allocations between South Carolina and North Carolina

The Duke-ORS Settling Parties agreed that jurisdictional cost allocations for ratemaking purposes will take into account the capacity and energy savings by state and the effects those savings have on actual generating plant costs, peak demand, and energy sales. Further, these effects will be incorporated into the allocation of production plant costs, such that South Carolina and North Carolina each receive appropriate credit for the results achieved and for the costs paid through Rider EE (SC). Order Exhibit 1, p. 8, ¶ 13. (Tr. Vol. 2, p. 546-547).

#### Compliance with Commission Policy

The Duke-ORS Settling Parties complied with the Commission's Settlement Policies and Procedures revised 6/13/2006 by filing an explanatory brief and joint motion and testimony supporting the settlement. The Duke-ORS Settlement Agreement is supported by substantial evidence in the record. Duke Energy Carolinas Witnesses Ruff and Farmer provided extensive testimony in regard to the Duke-ORS Settlement Agreement. Duke Energy Carolinas provided late-filed exhibits in response to questions of the Commissioners. The parties were allowed to file responses to the motion after the hearing outlining their positions on the Duke-ORS Settlement. The provisions of the Duke-ORS Settlement Agreement sufficiently address the concerns raised by the Environmental Intervenors. The Company's Energy Efficiency Plan may be reviewed after two years. This early review period will allow the Company, intervenors, ORS and the Commission to review the operation of the plan based on actual results. The Duke-ORS Settlement Agreement provides sufficient oversight and monitoring of this new approach and supports the Company's overall commitment for increased energy efficiency. It also will enhance customer energy efficiency offerings in Duke Energy Carolinas' service territory. Therefore, the Duke-ORS Settlement Agreement is in the public interest.

#### **EVIDENCE FOR FINDING AND CONCLUSION NO. 26**

The Piedmont Settlement Agreement and the Amended Piedmont Settlement Agreement are just, reasonable, and in the public interest. The evidence in support of this finding is based upon the exhibits and testimony of Duke Energy Carolinas Witness Hager and the tariff filings by Duke Energy Carolinas.

The Piedmont Settlement Agreement provided for the implementation of a discussion process between Duke, ORS, and Piedmont to determine if the issues raised by Piedmont could

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be resolved amicably, in the public interest and consistent with state and federal laws. The Amended Piedmont Settlement Agreement resolved the issues. The Amended Piedmont Settlement Agreement was filed with the Commission on July 11, 2008. The Amended Piedmont Settlement Agreement resolves all issues between Duke Energy Carolinas and Piedmont as expressly stated in page 2 of the Agreement. Order Exhibit 2, p. 2.

The Amended Piedmont Settlement Agreement acknowledges that Duke Energy Carolinas' proposed energy efficiency programs are not intended to displace natural gas or to encourage fuel-switching. The agreement also specifically clarified certain issues with the Smart \$aver® Programs. Duke Energy Carolinas and Piedmont also agreed to work together to develop certain joint energy efficiency programs. The Environmental Intervenors filed no response or objection to the joint motion to approve the Amended Piedmont Settlement Agreement. The Amended Piedmont Settlement Agreement includes the following provisions:

# Program Design and Intent

The Piedmont Settlement Agreement clarifies that the intent and design of the energy efficiency programs included in Duke Energy Carolinas' Energy Efficiency Plan: (a) are not intended to displace or replace natural gas appliances with competing electric appliances; (b) are not designed to encourage fuel-switching; and (c) require demonstrated electric energy savings in each application utilizing cost-effectiveness testing. Order Exhibit 2, ¶ 4.

# Residential and Nonresidential Smart \$aver®

With respect to its proposed Residential and Non-Residential Smart \$aver programs, paragraph 5 of the Amended Piedmont Settlement Agreement provides that: (a) the flexibility requested by the Company to shift funding among energy efficiency programs will be limited to reallocations among programs and their associated measures that have been filed and approved

by the Commission; (b) incentives offered by Duke Energy Carolinas will not exceed 50% of the installed cost difference between standard equipment and higher efficiency equipment for any program application, except for low income weatherization and residential lighting programs, or such other programs as may be ordered by the Commission at the request of parties other than Duke Energy Carolinas; and (c) Duke Energy Carolinas will promote on an equal basis and offer equivalent incentive payments for heat pumps and air conditioning. Order Exhibit 2, ¶ 5.

# Residential Smart \$aver® Air Conditioners and Heat Pump Incentive Program

Paragraph 6 of the Amended Piedmont Settlement Agreement clarifies the intention and design of the Residential Smart \$aver Air Conditioning Program. This program will provide incentives to customers, builders, and heating contractors to promote the use of high-efficiency air conditioners and heat pumps with electronically commutated fan motors ("ECM"). The program is designed to increase the efficiency of HVAC systems in new homes and for replacements in existing homes. Residences, condominiums, and mobile homes served by Duke Energy Carolinas would be eligible for both the air conditioner and heat pump components of this program. Order Exhibit 2, ¶ 6.

Paragraph 7 of the Amended Piedmont Settlement Agreement provides that the description of the Smart \$aver program will specify that if a home is either currently heated by a natural gas furnace or if natural gas is available at a new home, then a heat pump incentive is available if a heat pump is installed with ECM as part of a dual-fuel system that uses natural gas as the supplemental heat source. The Commission shall have continuing oversight of the operation of this provision and Duke Energy Carolinas will file an update report to the Commission specifying the enrollment and effect of this measure as part of its annual energy efficiency rider proceedings. Order Exhibit 2, ¶ 7.

#### Residential Smart \$aver

Paragraph 8 of the Amended Piedmont Settlement Agreement provides that under its Residential Smart \$aver the Company will not offer incentives for appliances until: (a) ENERGY STAR® ratings or some other nationally recognized ratings are established for these applications; and (b) it has obtained appropriate Commission approval for these programs. Incentives will not include hot water heating systems. Order Exhibit 2, ¶ 8.

### Nonresidential Smart \$aver

Paragraph 9 provides that under the Non-Residential Smart \$aver program energy efficiency measures for prescriptive or custom incentives must prove cost-effective under the Utility Cost Test ("UCT"). Cost-effectiveness will be measured based on the improvement in electric efficiency only. Custom incentives will apply only when there is an improvement in electric efficiency. In cases where electric equipment does not currently exist within a customer's facility, Duke Energy Carolinas will compare the proposed efficiency measure against the efficiency of the current code or standard electric equipment that would have been installed. Finally, custom incentive applications will not be originated by Duke Energy Carolinas; rather, custom incentives must originate with customers bringing new ideas to Duke Energy Carolinas for efficient electric applications after the customer has chosen the technology and fuel source. Order Exhibit 2, ¶ 9.

In paragraph 10 of the Amended Piedmont Settlement Agreement, Duke Energy Carolinas must file the list of measures and incentive amounts associated with each measure it proposes to offer as part of its Non-Residential Smart \$aver Program. The incentive amounts contained in the list will not be increased without a subsequent filing and approval by the Commission. Order Exhibit 2, ¶ 10.

# Joint Program Development

Paragraph 11 of the Amended Piedmont Settlement Agreement provides that Duke Energy Carolinas and Piedmont will work together in good faith for the benefit of consumers to design and implement joint energy efficiency programs that promote high-efficiency improvements to (i) new home or building construction, (ii) existing buildings or homes, (iii) energy audits, and (iv) home or building weatherization programs. All new programs jointly developed by Piedmont and the Company will be filed with the Commission for approval. Order Exhibit 2, ¶ 11.

### Continuing Review

Paragraph 12 of the Agreement provides that Piedmont does not object at this time to the programs and incentive levels set forth in the direct testimony of Company Witness Schultz. However, Piedmont reserves the right to assert objections to individual program filings made in this docket if Piedmont determines that any individual program filing (i) poses an unreasonable risk to free and fair competition between natural gas and electricity, or (ii) promotes the inefficient consumption of energy. Order Exhibit 2, ¶ 12.

# Compliance with Commission Policy

The Piedmont Settling Parties complied with the *Commission's Settlement Policies and Procedures revised 6/13/2006* by filing an explanatory brief and joint motion. Duke Energy Carolinas Witness Schultz provided extensive testimony about the proposed programs during the February hearing. (Tr. Vol. 1, p. 255-258 & Hearing Exhibit 4). Piedmont Witnesses Skains and Yoho testified about their concerns with the proposal. (Tr. Vol. 2, p. 964-968 & 975-981). Duke Energy Carolinas' Witnesses Schultz and Hager responded to Piedmont's concerns. (Tr. Vol. 1,

p. 277-278 & Vol. 2, p. 654-659). No party objected to the Amended Piedmont Settlement Agreement.

The Commission concludes that the Duke-Piedmont Settlement Agreement is in the public interest. The Amended Piedmont Settlement Agreement commits both the Company and Piedmont to ongoing collaborative efforts to promote energy efficiency in our joint service territories. Customers will benefit from increased program offerings through this coordinated effort. The agreement supports the Company's overall commitment for increased energy efficiency activity and will enhance customer energy efficiency offerings in both gas and electric territories.

### **Verification and Evaluation**

# **EVIDENCE FOR FINDING AND CONCLUSION NO. 27**

The proposed plan for verifying savings using independent third parties will enable the Company, the Commission, ORS and other interested stakeholders to quantify savings produced by these programs, to identify the most effective programs, and to design improvements for programs over time. The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witnesses Hall and Stevie.

Company Witness Stevie testified about the Company's proposed method to evaluate and verify the impacts achieved from the proposed energy efficiency programs. (Tr. Vol. 1, p. 371-375 & Hearing Ex. 5/Stevie Exhibit 3). Company Witness Nick Hall provided extensive testimony on the program evaluation proposals and analysis filed by Duke Energy Carolinas for its save-a-watt energy efficiency and demand reduction programs. Mr. Hall testified that Duke Energy Carolinas has adequately provided for the independent review and evaluation of its proposed programs by establishing initial evaluation plan summaries that propose specific

energy efficiency evaluation studies and activities, which will be competitively bid, designed, managed, supervised, or conducted by independent and qualified evaluation professionals. (Tr. Vol. 1, p. 31). He testified that the Company's approach is reliable because it moves the evaluation function that documents the amount of energy saved, or how effective a program design or delivery system may be, outside of the company that has a vested interest in the outcome of the studies. (*Id.*). This serves to strengthen the extent to which unbiased and accurate program reporting occurs. (Tr. Vol. 1, p. 32).

Witness Hall confirmed that Duke Energy Carolinas' energy efficiency program evaluation summaries are consistent with state-of-the-art evaluation protocols such as the International Performance Measurement and Verification Protocol, National Action Plan for Energy Efficiency, and California Energy Program Evaluation Protocols. (Tr. Vol. 1, p. 32-33). He further testified that the results from studies conducted by the approaches presented in Duke Energy Carolinas' energy efficiency programs will be reliable and can be trusted if the evaluations are conducted in accordance with these approaches. (Tr. Vol. 1, p. 33).

Duke Energy Carolinas proposes to verify, generally, 5 percent of the installed measures, focusing on the high savings, high priority measures more so than the low savings programs or programs with a low number of installed measures. (Tr. Vol. 1, p. 35, 375 & Hearing Exhibit 5/ Stevie Exhibit 4). Witness Hall testified that 5 percent is adequate for the initial year of implementation for verification with the condition that if a problem with the accuracy of the installations is identified, there should be increased verification for that program to confirm that any installation or accounting issues have been corrected. (*Id.*).

Witness Hall testified that Duke Energy Carolinas' proposal to initially budget approximately 5% of program costs for measurement and verification should result in reliable

evaluation results if the studies are well designed and targeted. (Vol. 1, p. 37). Mr. Hall explained that it will be important to allocate evaluation dollars to the most important programs; for smaller programs, or for programs that provide smaller savings levels, the evaluation funding may need to be less than 5 percent. (Vol. 1, p. 37-38). He testified that he believes the 5 percent level is a reasonable place to start, but some option to raise this level quickly if necessary would also be a prudent strategy. (Vol. 1, p. 38).

Witness Hall testified that the evaluation reporting timeline proposed by Duke Energy Carolinas is both reasonable and achievable. (Vol. 1, p. 38). The evaluation planning process is to be achieved after the programs are up and running. (Vol. 1, p. 38-39). He explained that this is important because the evaluation needs to be based on the programs as fielded rather than the programs as designed. It is important to give the program time to come up to full implementation speed before a full scale evaluation effort is initiated. (Vol. 1, p. 39). The impact evaluations often need to occur a year or more after enough installations have occurred to allow the study enough consumption data to reliably estimate the difference between the pre-program and post-program conditions. (*Id.*).

No Intervenor has offered any evidence to suggest that the Company's measurement and verification plan should not be approved. Based on the foregoing evidence, the Commission concludes that Duke Energy Carolinas' desire to establish independent evaluations from qualified third parties indicates that the Company is focused on establishing an evaluation/auditing function geared to provide accurate and reliable energy savings estimates and program effectiveness feedback, and that the budget and timeline proposed by Duke Energy Carolinas for evaluation are reasonable.

#### **EVIDENCE FOR FINDING AND CONCLUSION NO. 28**

Program flexibility is necessary to enable Duke Energy Carolinas to deliver all costeffective energy efficiency to be built into the Company's IRP. The evidence in support of this
finding is based upon the testimony of Duke Energy Carolinas Witness Schultz. Mr. Schultz
testified that Duke Energy Carolinas needs to be able to make program changes and reallocate
resources among programs over the lives of the programs to optimize results for both customers
and the Company. (Tr. Vol. 1, p. 260). According to Mr. Schultz, this flexibility is crucial to the
success of the undertaking, particularly given the innovative nature of the effort and the need to
make timely and responsive changes as the Company gains experience working with customers
in the energy efficiency markets. (*Id.*).

After the initial two year implementation period, the Energy Efficiency Plan may be subject to a full review and evaluation by ORS. The purpose of the two year review provision in the Duke-ORS Settlement Agreement was to afford an opportunity to make necessary improvements early in the process. (Tr. Vol. 1, p. 144-145, 152). Duke Energy Carolinas then proposes to review and adjust programs and overall portfolio funding levels on an annual basis. (Tr. Vol. 1, p. 260-261). Any changes will be based on the performance of the programs, market conditions, economics, and consumer demand. (Tr. Vol. 1, p. 261). The Company will report annually to the Commission on significant program changes, proposed new programs, and program evaluation results. (*Id.*).

In response to the Company's request for flexibility in the management of its energy efficiency portfolio, Environmental Intervenor Witness Nichols asserts that the program flexibility sought is intended to allow Duke Energy Carolinas to manipulate its energy efficiency programs to increase profits from demand-side programs. (Tr. Vol. 2, p. 766). Company Witness

Schultz explained that the profitability of the portfolio is hard to predict because it is dependent on the Company's marketing efforts. (Tr. Vol. 1, p. 270). Program flexibility is designed to enable the Company to deliver all cost-effective energy efficiency which can be built into the Company's IRP. Because it is difficult to predict the success of marketing programs, the Company needs the ability to adjust product offerings, incentives and marketing tactics to respond to what it learns in the market. (Tr. Vol. 1, p. 270-271).

The Commission agrees that Duke Energy Carolinas needs to maintain flexibility to adjust its programs in order to maximize benefits to its customers. Requiring Commission approval every time the Company wishes to tweak its programs will be burdensome and will stifle the innovation that characterizes Duke Energy Carolinas' Energy Efficiency Plan.

# **Energy Efficiency Rider**

#### **EVIDENCE FOR FINDINGS AND CONCLUSIONS Nos. 29 & 30**

The approval of Rider EE (SC) to recover the amortization of and return on 85% of the costs avoided through implementation of its proposed energy efficiency programs is reasonable, prudent, and in the public interest. The Rider EE (SC) billing factors shall be calculated separately for residential, commercial, and industrial customers. The proposed formula to calculate Rider EE (SC) and the charges to be effective for the initial Rider period are approved. The evidence in support of these findings is based upon the testimony and exhibits of Duke Energy Carolinas Witnesses Farmer and Ruff.

The incentive must be sufficient to induce the optimum level of energy efficiency investment that is cost-effective. The Company has demonstrated that its portfolio of programs is cost effective and has the potential to achieve considerable energy savings. Duke Energy Carolinas also illustrated that substantial investment in energy efficiency is not likely absent

regulatory treatment that places energy efficiency on par with generation in terms of earnings and earnings growth. (Tr. Vol. 1, p. 143-144).

Company Witness Stephen M. Farmer provided detailed testimony on proposed Rider EE (SC) including the mechanics and calculations that are incorporated within the Rider. Witness Farmer testified that the proposed Rider is designed to allow Duke Energy Carolinas to collect a level of revenue equal to 85% of the cost of the capacity and energy that the Company avoids through the capacity and energy savings achieved by the programs in place that year. (Tr. Vol. 2, p. 524-525, 545 & 552). Amounts billed to customers under the Rider will be comprised of a charge based on 85% of the jurisdictional revenue requirement applicable to projected avoided capacity and energy costs and a Balance Adjustment. (Tr. Vol. 2, p. 525, 545 & 552). Amounts billed under the Rider will be increased to the extent that actual load reductions exceed projected load reductions. (Tr. Vol. 2, p. 525). Customers will receive a credit if the Company is unable to achieve projected energy and capacity savings. (*Id.*).

Duke Energy Carolinas proposes that the rate used to quantify the value of avoided capacity costs be based on the standard offer rate paid for energy received from a QF as defined by PURPA. (Tr. Vol. 2, p. 526). Load savings are accumulated on a vintage basis. (Tr. Vol. 2, p. 526-527).

Witness Farmer testified that the determination of annual avoided capacity costs is based on a multi-step process. The first step is to calculate the projected jurisdictional revenue requirement applicable to annual avoided cost savings in nominal dollars for each year that programs are in place for a particular vintage. (Tr. Vol. 2, p. 528). This calculation results in a revenue stream that increases over time because the avoided cost QF rate recovers costs on a "levelized" basis. (Tr. Vol. 2, p. 530). The declining revenue stream that one would normally

expect under traditional rate making is converted to an amount that is fixed/levelized over the life of the asset. (*Id.*). Mr. Farmer explained that through this levelization process, the Company is attempting to put energy efficiency on an equal footing with supply-side options, and to remove any disincentives that might impede implementation of cost-effective energy efficiency programs. (Tr. Vol. 2, p. 531).

Witness Farmer testified that the stream of avoided cost revenue requirements is converted to a present value amount by discounting the future avoided cost revenue stream using the Company's before-tax weighted average cost of capital as the discount rate. (*Id.*) The Company then amortizes the present value revenue requirement over the life of the programs that gave rise to the avoided cost capacity savings and calculates carrying costs on the unamortized balance at the Company's before-tax weighted average cost of capital. (Tr. Vol. 2, p. 532). Witness Farmer explained that the Company believes that the return on avoided capacity costs should be based on the weighted average cost of capital, including both a debt and equity component, just as the Company is compensated for generation plants. (*Id.*). The result is that the revenue stream billed to customers will be reshaped to look more like the revenue stream that would occur under normal rate making. (*Id.*).

According to Mr. Farmer, the energy impacts of each energy efficiency measure are obtained from the DSMore analyses described by Company Witness Stevie. (Tr. Vol. 2, p. 533 & Vol. 1, p. 362-367). The hourly kilowatt-hour reductions are multiplied by the hourly marginal energy costs from the production costing model used by Duke Energy Carolinas in its IRP analysis in order to estimate the savings that customers will realize. (Tr. Vol. 1, p. 533). The future stream of projected energy cost savings will be converted to a net present value amount by discounting the projected savings using the Company's before-tax overall weighted average cost

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of capital. (Id.).

Witness Farmer explained that Duke Energy Carolinas converts the future stream of energy cost savings to a present value amount because revenues relating to the recovery of avoided energy cost savings are a function of cash flow and are expense driven. (Tr. Vol. 2, p. 534). Upfront expenditures incurred to achieve savings will be funded through the retained percentage of avoided energy cost savings. (*Id.*). Mr. Farmer explained that the reshaping of the stream of energy cost savings has the effect of mitigating to some extent the negative cash flow effects resulting from the difference between cash flow out and cash flow in. (Tr. Vol. 2, p. 534-535).

Witness Farmer testified that the Avoided Capacity Revenue Requirement and the Avoided Energy Revenue Requirement are summed and multiplied by 85% to determine the Avoided Cost Revenue Requirement to be collected from customers during the Rider period. (Tr. Vol. 2, p. 535 & 545). The Rider only collects the revenue requirements associated with the year in which the Rider is in effect. (*Id.*).

Mr. Farmer testified that when evaluations of programs are complete, the true-up mechanism will adjust the revenues so that the Company is paid only for results achieved. (Tr. Vol. 2, p. 536). The true-up mechanism described in Rider EE (SC) is designated as the "Balance Adjustment." (*Id.*). The Balance Adjustment mechanism compares the revenues actually collected for the evaluated programs to the revenue requirement that would have been calculated at the time, if the actual results had been known. (*Id.*). Mr. Farmer described how the Balance Adjustment is calculated by determining both the revenue requirement that the Company would be entitled to based on verified results and the revenues the Company actually collected under Rider EE (SC) during a previous period. (*Id.*).

Witness Farmer explained that under the Company's proposal, billing factors will be calculated separately for residential and non-residential customers. (Tr. Vol. 2, p. 525). The residential charge will be calculated based on the avoided costs of programs available to residential customers; the non-residential charge will be calculated based on the avoided costs of programs applicable to non-residential customers. (Tr. Vol. 1, p. 525-526). The Company seeks approval for the first year Rider EE (SC) charge of \$0.001586 per kilowatt-hour for residential customers, \$0.000984 per kilowatt-hour for general service customers, and \$0.000665 for industrial customers. (Tr. Vol. 2, p. 549).

S.C. Code Ann. Section 58-37-20 (Supp. 2007) provides that the Commission may establish a rider to a utility's rates to recover all reasonable and prudent costs incurred for the adoption and implementation of new demand-side management and new energy efficiency measures. In determining the amount of that rider, the Commission may also approve appropriate utility incentives, including net lost revenues. *Id.* The Commission considers 85% of avoided costs to be an appropriate incentive. It allows the Company a rate of return similar to investment in generation, yet provides a 15% discount to customers compared to supply-side investment. In addition, the Company only gets to retain 85% of avoided costs if it achieves verifiable results. Therefore, we approve the proposed formula used to calculate Rider EE (SC) and implementation for the first year Rider EE (SC) charge of \$0.001586 per kilowatt-hour for residential customers, \$0.000984 per kilowatt-hour for general service customers, and \$0.000665 for industrial customers. The Commission grants Duke Energy Carolinas' request that actual implementation of Rider EE (SC) begin on the first billing cycle in April 2009. The ORS may

The 85% of avoided costs does not include an incentive in addition to program costs. The 85% of avoided costs is not profit but rather covers the costs of administering and implementing the proposed programs, including advertising and marketing,

conduct a full review and evaluation of the plan subsequent to the second anniversary of the effective date of Rider EE (SC). Additionally, there is an opportunity for Commission review in an energy efficiency rider hearing to be held after the Company's annual fuel hearing.

#### **Accounting and Reporting**

#### EVIDENCE FOR FINDING AND CONCLUSION No. 31

It is reasonable to allow Duke Energy Carolinas to defer the program costs and to amortize them over the life of the applicable program in order to implement the save-a-watt compensation model. The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witness Jacobs.

Dwight Jacobs, Duke Energy's Vice President of Franchised Electric & Gas Accounting, testified that the Company seeks to defer costs it will incur in one period but which relate to benefits received in multiple future periods. (Tr. Vol. 2, p. 613). Such costs include the upfront development costs incurred prior to the implementation of the programs, such as for program design, development of training materials, and development of communication and advertising materials. (Tr. Vol. 2, p. 613-614). They also include one time incentives paid upfront for the installation of energy efficiency measures or equipment such as heat pumps. (Tr. Vol. 2, p.614). Ongoing costs incurred after a program is implemented, such as program administration costs and credits to customers who participate in demand-response programs will be expensed as incurred. (*Id.*). Such costs are incurred routinely and amounts paid in any year relate to the benefits derived from those programs in the same year. (*Id.*).

Mr. Jacobs testified that deferral and amortization of energy efficiency program costs, many of which are incurred at the inception of a program, matches the expenses to the associated capacity and energy savings benefits produced over the life of the program. (Tr. Vol. 2, p. 615).

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He explained that this treatment is consistent with treating investment in energy efficiency similarly to an investment in plant, which is capitalized on the Company's balance sheet and subsequently depreciated through its income statement over a period equal to its estimated life. (*Id.*).

In the Company's most recent general rate case proceeding (Docket No. 91-216-E), the Commission approved a deferred account process with carrying cost coverage and subsequent cost of service amortization for DSM cost recovery. The Commission reaffirmed its approval of this cost recovery mechanism in Order No. 93-8, Docket No. 92-208-E. The Commission has also approved amortization of the DSM deferred costs in Order No. 96-337. The Commission concludes that the Company's proposed new accounting system which defers program costs and amortizes them over the life of applicable programs with the acknowledgement that the revenues established under the proposed Rider EE (SC) specifically include the recovery of incurred program costs is a reasonable approach.

#### **EVIDENCE FOR FINDING AND CONCLUSION No. 32**

The Company's proposed reporting of the impacts of the save-a-watt program in its Quarterly Reports appropriately excludes the impact of the incentives from the earnings amount reported. The evidence in support of this finding is based upon the testimony of Duke Energy Carolinas Witnesses Jacobs and Ruff.

Company Witness Jacobs testified as to how Duke Energy Carolinas' energy efficiency program revenues should be treated for regulatory reporting purposes. Jacobs testified that energy efficiency revenues should be based upon the investment choice between utility generation and conservation. The proposed reporting treatment helps accomplish that goal by ensuring that the earnings stream produced under the Energy Efficiency Plan is treated similarly

to that which would have been produced by the avoided plant investment for reporting purposes. (Tr. Vol. 2, p. 616-617).

Duke Energy Carolinas proposed to account for the impacts of the proposed regulatory treatment in its Quarterly Reports as follows: the Company will include (a) revenues earned through Rider EE (SC), and (b) expenses calculated at 85% of the avoided generation costs as calculated in Rider EE (SC). (Tr. Vol. 2, p. 617). Actual program costs for the reporting period will be included for information purposes as a footnote in the Reports. (*Id.*). The individual program costs will be reflected in the annual filing true-up process. (Tr. Vol. 2, p. 630). The Company projects that the revenues it collects over a period of time will be adequate to cover all program costs, including development and on-going costs. (Tr. Vol. 2, p. 618).

Duke Energy Carolinas Witness Ruff also explained that the purpose of the change is to make clearer that the Company is not seeking to recover the higher of its program costs or 85% of the avoided generation costs. Duke Energy Carolinas will not recover program costs that exceed 85% of the avoided generation costs. Electric Operating Revenues will include only 85% of the avoided generation costs. (Tr. Vol. 1, p. 145-146). The Quarterly Reports will show the revenue coming in from the energy efficiency programs. The Company intends to detail and list the program costs in the footnote so the information will be transparent. (Tr. Vol. 1, p. 152-153).

S.C. Code Ann. Section 58-37-20 (Supp. 2007) provides that the Commission may provide incentives for utilities for adopting energy efficiency measures. The Company's proposed reporting of the impacts of the Company's Energy Efficiency Plan in its Quarterly Reports appropriately excludes the impact of the incentives from the earnings amount reported so that the Company's reported earnings, when assessed against its allowed rate of return, are not

inflated by the incentives that are needed and appropriate to encourage investment in energy efficiency measures.

### IT IS, THEREFORE ORDERED:

- 1. That the Application of Duke Energy Carolinas for Approval of Save-a-Watt Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency Programs as amended by the Duke-ORS Settlement Agreement and the Amended Piedmont Settlement Agreement is hereby granted;
- 2. That the implementation of Duke Energy Carolinas' save-a-watt approach as amended by the Duke-ORS Settlement Agreement and the Amended Piedmont Settlement Agreement is hereby approved;
- 3. That Duke Energy Carolinas' portfolio of proposed energy efficiency programs as amended by the Duke-ORS Settlement Agreement and the Amended Piedmont Settlement Agreement is hereby approved;
- 4. That Duke Energy Carolinas' proposed manner of maintaining program flexibility with limitations is hereby approved;
- 5. That the closing of the Interruptible Service Rider (Rider IS), Standby Generation Control Rider (Rider SG), Residential Load Control Rider (Rider LC), and Residential Housing Program is hereby approved;
- 6. That Duke Energy Carolinas' proposal for an independent third party to verify megawatt and megawatt-hour savings resulting from the Company's Energy Efficiency Plan is hereby approved;

- 7. That Duke Energy Carolinas' cost recovery model and proposed Rider EE (SC) is hereby approved and the Company shall implement the billing factors of \$0.001586 per kilowatthour for residential customers, \$0.000984 per kilowatthour for general service customers, and \$0.000665 per kilowatthour for industrial customers effective for bills rendered on and after the first billing cycle in April 2009;
- 8. That Duke Energy Carolinas' proposed deferral of program costs and amortization of such costs over the life of the applicable program is hereby approved;
- 9. That Duke Energy Carolinas' proposed manner of accounting for the impacts of its Energy Efficiency Plan in the Commission's Quarterly Surveillance Reports is hereby approved;
- 10. That the Duke-ORS Settlement Agreement and the Amended Piedmont Settlement Agreement are incorporated herein by reference and are found to be in the public interest;
- 11. That the Parties shall abide by all terms of the Duke-ORS and Amended Piedmont Settlement Agreements; and
- 12. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

|                               | Elizabeth E. Fleming, Chairman |  |  |
|-------------------------------|--------------------------------|--|--|
| ATTEST:                       |                                |  |  |
| John E. Howard, Vice-Chairman |                                |  |  |